DOCUMENT RESUME

ED 056 503 EM 009 360

TITLE Proceedings of the 4th NAII Conference. Multiple Choice: The True Test of the Future.

INSTITUTION National Association For the Individualization of Instruction, Wyandach, N.Y.

PUB DATE 71

NOTE 130p.; Proceedings of Conference of the National Association for the Individualization of Instruction (New York, N.Y., November 7-9, 1971)

AVAILABLE FROM Mr. Angelo A. Cialdea, WLC-Waltham, 125 Wyman Street, Waltham, Massachusetts 02154 ($5.00 plus postage)

EDRS PRICE MF-$0.65 HC-$6.58

DESCRIPTORS *Conference Reports; *Educational Innovation; *Flexible Scheduling; *Individualized Instruction; *Nongraded System

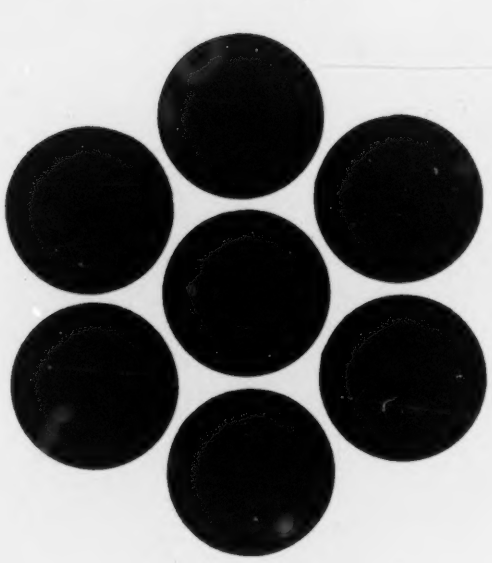
ABSTRACT

The report of a conference on individualized instruction contains brief descriptions of the two conference sponsors--the Westinghouse Learning Corporation and the National Association for the Individualization of Instruction. The report also provides abstracts of some speeches delivered at the conference and biographies of the speakers. A bibliography of individualized instruction, nongraded classes, differentiated staffing, and environmental variables associated with individualized instruction is also included. Three resource papers are appended--one on nongraded education by instrumentation and two reports of other conferences on individualized instruction. (JY)

ED056503

4th NAII Conference

Multiple Choice:



The True Test of the Future

1

National Association for the Individualization of Instruction
and
Westinghouse Learning Corporation

EM 009 360

National Association for the Individualization of Instruction

AND

Westinghouse Learning Corporation

1971 Conference

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

2

November 7, 8 and 9
Americana Hotel
New York, New York

STEERING COMMITTEE

Conference Director

Angelo A. Cialdea
Westinghouse Learning Corporation
Waltham, Massachusetts

Assistant

Noel C. Medrow
Westinghouse Learning Corporation
New York, New York

President, NAII

James Lewis, Jr.
Wyandanch, New York

Vice-President, NAII

James Butler
Wyandanch, New York

Secretary/Treasurer, NAII

Donald Kelton
Wyandanch, New York

BACKGROUND

WLC

TRADITIONAL SCHEDULING

The modern secondary school offers its students a highly diversified curriculum. It is not uncommon for the number of available courses to exceed one hundred and for many of these to be composed of multiple sections or classes. It's easy to understand why the task of preparing a master schedule and student schedules has become exceedingly complex and tedious.

The administration must try to satisfy the academic desires of the students while being mindful of practical considerations such as teacher class loads, semester balance and building utilization. Much of this work is essentially clerical and repetitive in nature; it wastes administrative time, is subject to extensive error and usually ends up requiring changes that may take weeks or even months to complete.

Westinghouse Learning Corporation has developed a computerized scheduling system which is efficient, effective and econominal. More importantly, the system meets the requirements of the school administrator. Just a few of its many important features include:

- the assistance of an experienced educational consultant;
- extensive error checking and editing procedures;
- a powerful class loading program; and
- built-in flexibility which allows easy conversion to flexible modular scheduling and other innovative systems.

GRADE REPORTING

Westinghouse Learning Corporation has developed a computerized grade reporting system as part of a comprehensive educational data services program. The system, which was designed by educators and computer experts, has proven to be reliable and responsive to the needs of secondary schools. It is completely compatible with WLC traditional and flexible scheduling systems and gains in efficiency through the use of data collected from these systems.

Versatility is one of the system's important points: six-week or nine-week grading periods may be used; variable grade weights may be assigned; credit may be based on semester grades or end-of-year grades; and courses may have different credit values ranging from 0.00 to 9.00. Efficiency, simplicity and reliability are the other attractive features of WLC's grade reporting system: it saves a substantial amount of time and effort; it's easy to use and understand; and the generated information is consistently accurate and complete.

The basic reporting service provides the school with several important items including report cards, cumulative pupil attendance reports and lists of pupils with failing or incomplete grades. In addition, a school may elect to receive a variety of optional reports and services:

- Rank in Class Lists
- Frequency Distribution of Grades
- Comments on Report Cards
- Class Lists with Cumulative Grades
- Maintenance of Cumulative Grade Point Average
- Summary Lists by Counselor

EDUCATIONAL CONSULTING

Westinghouse Learning Corporation is striving to assist schools with methodical, well-planned change. To WLC, change means progress for the betterment of education: improvement in teaching methods; better understanding between teachers and students; the implementation of new programs or the revision of traditional ones; and the revamping of teaching-learning philosophies to keep pace with today's educational generation.

In advocating this change, we feel an essential ingredient is the proper use of consultants. And because educational problems differ from those in industry, WLC has built a consulting staff consisting of former school administrators and professionals with first-hand knowledge and expertise in the development and operation of school programs. Expert assistance is available in administration, computer systems, curriculum development and a variety of other important educational areas.

The Board of Education, the administration and the public have a right to question the need for using "outside" consultants. Is it really necessary? What will be accomplished? When and how do you choose the firm and the consultant? To answer some of these questions, you should review all of the points listed on the following pages.

If you then feel that further discussion of your particular educational problems would be helpful, a WLC consultant will contact you personally, with no obligation. The WLC educational consulting office nearest you is listed on the last page of this brochure.

FLEXIBLE MODULAR SCHEDULING

Flexible modular scheduling is one of the innovative educational services offered by Westinghouse Learning Corporation. It is a tool which the local school administrator can use to great advantage to individualize instruction so students can learn at their own pace. The Westinghouse Learning Corporation Flexible Modular Scheduling System, which incorporates the Stanford School Scheduling System, generates the school master schedule, assigns students to classes, and produces class lists, and teacher, room and student schedules.

This scheduling tool allows the school to utilize a greater number of time blocks than in traditional scheduling. By combining time blocks, the school may schedule its classes for various lengths, frequencies, class sizes, staffing patterns and instructional activities. Traditional periods are replaced by "mods" (modules of time) of usually 15 to 20 minutes. The number of mods varies from class to class and from day to day for various classes. Students meet in large lecture groups, in small groups, and in lab sessions. Students may also have 25 to 50 percent of their time unscheduled when they can choose their own activities.

The implementation of a flexible modular schedule does not by itself make a drastic change in the curriculum. It does, however, provide the opportunity to change the present curricula to provide a much more individualized approach to the programming of each student. Flexible scheduling enables the administrator and the educational staff to make optimum use of the faculty's time, the students' time, and the school facilities and offers the opportunity to provide an individualized program for the student and the teacher. The faculty will have more opportunity to structure and teach their classes using the most appropriate instructional materials and methods.

Schools which consider a flexible modular schedule usually do so in order to meet certain objectives which they have determined to be meaningful for their setting. These objectives usually include some or all of the following points:

1. To individualize instruction.
2. To further the professionalization of the teaching staff.
3. To expand, develop, and improve curriculum.
4. To implement new instructional methods.

5. To instill within the students some degree of responsibility for their own education.

If your faculty has collectively asked questions such as these: How can we better educate our slow learners? How can we help our upperclassmen prepare for the greater independence they will find in college? How can we enable the boy with five majors and physical education to sample some minors? How can we bring our program into line with our stated belief in individualizing instruction? - then it's time you seriously investigated flexible modular scheduling.

BACKGROUND

NAII

National Association for the Individualization of Instruction is an organization dedicated to: developing unity in the movement for individualized instruction; producing available and invaluable materials about individualizing instruction for its membership; continuously alerting school district administrators, educators, agencies and the general public to the need for individualizing the instruction program; and establishing a home base for those interested in obtaining further information, expertise leadership and planning in the area of individualizing instruction.

NAII SERVES THROUGH:

Conferences - NAII conducts an annual conference with some of the most renowned educators in the United States. Each member of the association will get an opportunity to present his specific program and receive valuable suggestions and recommendations by those who are knowledgeable in the subject. The information, suggestions and recommendations obtained from the participants of the previous conference are carefully incorporated in the planning of the forthcoming conference, usually held in the spring. At the last two conferences, there were more than 3,000 inquiries. Approximately 1,000 registrants and 35 educational experts participated in each of the conferences. More than 700 persons were refused admittance to the first conference because of a space limitation. It is felt by the members that student participation enhances the effectiveness of the numerous workshops and demonstrations that are conducted. For this reason the conferences are usually held in a school facility.

Clearing House and Consultation Service - As a direct result of NAII's wide contacts, the association is equipped to perform clearing house and consulting services in the field of individualization of the instructional programs. The association, while serving as a bank for relevant materials on the Individualization of Instruction periodically develops and compiles research data on this subject. All of these materials are made available to all members at no extra cost.

Institutes - NAII sponsors a minimum of two institutes a year on some aspect of the individualization of instruction. The last institute registering more than 40 persons emphasized the development of behavioral objectives. Included in the program was a manual, which provided a much broader prospectus of this subject area that had been developed specifically for this particular institute.

Publications - NAII published newsletters, pamphlets, manuals and bulletins throughout the year. All publications, except those considered major by the association, will be provided to all members at no cost. Booklets on the events which took place at the annual conferences will be available to all interested persons with a reduced cost to those individuals who are members of the organization.

PROGRAM

P R O G R A M

SUNDAY, NOVEMBER 7, 1971

Registration *Conference Materials and Name tags	Albert Hall Foyer	10:00am-5:00pm
View Exhibits and Displays	Albert Hall	2:00pm-8:00pm
*Social hour (buffet)	Albert Hall	5:00pm-7:30pm

SESSION I

Royal Ballroom — 8:00pm

Greetings: Dr. James Lewis, Jr., President
National Association for the
Individualization of Instruction

Keynote Address
Introduction: Dr. Harvey Brudner, President
Westinghouse Learning Corporation

Speaker: Dr. Paul Brandwein
"The Permanent Agenda of Man"

MONDAY, NOVEMBER 8, 1971

*Breakfast

Exhibits Open — Albert Hall — 8:00am

SESSION II

9:15am-10:30am

Dr. Edward Pino, Albert Hall
Cherry Creek Schools
"A Taxonomy for Individualization"

Dr. Lloyd K. Bishop, Loire 2 and 3
New York University
Flexible Modular Scheduling
"Is it Working"

Mr. Clark Donlin, Loire 4 and 5
Metuchen School District
"Strategies for Realistic Staff Development"

Dr. Charles Reasoner, Albert Hall
New York University
"Individualization; So That All May Learn"

Dr. Michael Van Ryn — Buckingham A
New York State Department
of Education
"Implementation of Innovative Programs"

Mr. George Cureton, — Albert Hall
Wyandanch Public Schools
"Action Reading Through Three Dimentional Sounds"

Mr. Eugene Lissandrello, — Buckingham B
Connetquot School District
*"Death in Venice and Times Square,
the Aesthetics of Eye Pollution"*

*Coffee Break — 10:30am-10:45am

SESSION III

10:45am-12:00pm

Mrs. Muriel Gerhard, — Albert Hall
Co-Director of Project AMP
"Cognitive Strategies and Cognitive Curricula"

Dr. Edward Pino, — Albert Hall
Cherry Creek Schools
"A Taxonomy for Individualization"

Dr. Lloyd K. Bishop, — Loire 2 and 3
New York University
Flexible Modular Scheduling
"Is it Working"

Dr. Sidney Rollins — Biarritz
Rhode Island College
*"Organizing Curriculum Materials for Individualizing
Instruction"*

Dr. Michael Van Ryn — Buckingham A
New York State Department
of Education
"Implementation of Innovative Programs"

Dr. Roy Stern, — Buckingham B
Learning Research Associates
"Effective Use of Performance Objectives"

Dr. Kevin Ryan, — Albert Hall
University of Chicago
*"Care and Feeding of Beginning Teachers:
Or Leading the Lambs to Slaughter"*

Dr. Lloyd K. Bishop, Albert Hall
New York University
Flexible Modular Scheduling
"Is It Working"

Dr. I. L. Roy Stern Loire 2 and 3
Learning Research Associates
"Effective Use of Performance Objectives"

Dr. Charles Reasoner, Loire 4 and 5
New York University
"Individualization; So That All May Learn"

Mr. Eugene Lissandrello, Buckingham B
Connetquot School District
"Death in Venice and Times Square, the Aesthetics of Eye Pollution"

Mr. Clark Donlin, Buckingham A
Metuchen School District
Dr. James Lewis, NAII
Developing Needs Assessment Program - Implementing School Management By Objectives.

Dr. Robert Sinclair, Albert Hall
University of Massachusetts
A Plan for Change: *"Give the School Back to the People"*

Dr. Kevin Ryan, Albert Hall
University Of Chicago
Dr. John Bremer,
Newton College of the Sacred Heart
Rap Session: *"Don't Smile Until Christmas"*
"Schools Without Walls"

*Social Hour Albert Hall 6:00pm
Meet your speakers!

SESSION VI

*Banquet Royal Ballroom 8:00pm

Introduction: Mr. James Butler, 9:00pm
Vice President NAII

Speaker: Mr. Arthur C. Clark
"Education In The Year 2001"

Dr. Robert Sinclair, Monte Carlo
University of Massachusetts
A Plan for Change *"Give the School Back to the People"*

Dr. John Bremer, Loire 4 and 5
Newton College of the
Sacred Heart
"Management and Freedom"

Lunch 12:00pm-2:00pm

EXHIBITS OPEN

SESSION IV

2:00pm-3:15pm

Mr. Clark Donlin, Loire 4 and 5
Metuchen School District
"Strategies for Realistic Staff Development"

Dr. Charles Reasoner, Albert Hall
New York University
"Individualization: So That All May Learn"

Dr. I. L. Roy Stern Albert Hall
Learning Research Associates
"Effective Use of Performance Objectives"

Dr. Michael Van Ryn Buckingham A
New York State Department
of Education
"Implementation of Innovative Programs"

Mr. Eugene Lissandrello, Buckingham B
Connetquot School District
"Death In Venice and Times Square,
the Aesthetics of Eye Pollution"

Mr. George Cureton, Albert Hall
Wyandanch Public Schools
"Action Reading Through Three Dimentional Sounds"

Dr. Sidney Rollins Loire 2 and 3
Rhode Island College
Dr. James Lewis, NAII
Two Authors Rap on Non-graded Education

SESSION V

3:30pm-4:45pm

Mrs. Muriel Gerhard, Monte Carlo
Co-Director of Project AMP
"Cognitive Strategies and Cognitive Curricula"

TUESDAY, NOVEMBER 9, 1971

*Breakfast

Exhibits Open — Albert Hall — 8:00am

SESSION VII

9:15am-10:30am

Dr. Robert Anderson, Albert Hall
Harvard University
"Humanizing Instruction for Realistic Learning"

Dr. Gaye McGovern, Vendome 11 and 12
Syracuse Public Schools
"LAPs: *A Vehicle for Individualizing Learning In Secondary Schools*"

Mr. Roger Aubrey, Albert Hall
Brookline Public Schools
"School - Community Drug Prevention Program"

Dr. Joseph Lipson, Lorre 4 and 5
University of Illinois
at Chicago Circle
Discussion: *"National Institute for Innovations in Education"*

Mr. Lloyd Ferguson, Chelsea A
Westinghouse Learning Corp.
Demonstration Classroom Situation:
Individualization of Instruction - Project Plan (extended time period)

Mr. John Stefani, Albert Hall
Project S.P.O.K.E.
"The Preparation of Differentiated Learning Packets for Individualizing Instruction"

Mr. John Dow, Chelsea B
Research for Better Schools
Individually Prescribed Instruction - Program in Mathmatics

Dr. and Mrs Charles Raebeck, Loire 2 and 3
Dowling College
Workshop in Human Relations

*Coffee Break — 10:30am-10:45am

SESSION VIII

10:45am-12:00pm

Dr. Robert Anderson, Harvard University
Dr. James Lewis, NAII
Dr. Charles Raebeck, Dowling College — Albert Hall
"Damnation of Traditional Education!

Mr. John Stefani, Project S.P.O.K.E. — Albert Hall
"The Preparation of Differentiated Learning Packets for Individualizing Instruction"

Mr. John Dow, Research for Better Schools — Chelsea B
Individually Prescribed Instruction - Program in Mathmatics

Dr. Gaye McGovern, Syracuse Public Schools — Loire 2 and 3
"LAPs: *A Vehicle for Individualizing Learning in Secondary Schools"*

Mr. Roger Aubrey, Brookline Public Schools — Albert Hall
"Re-ordering Educational Priorities to Accomodate the Personal Development of Students"

Dr. Joseph Lipson, University of Illinois at Chicago Circle — Loire 4 and 5
Discussion: *"National Institute for Innovations in Education"*

Dr. Allan Glatthorn, Alternative Schools Project — Vendome 11 and 12
"Individualized Instruction"

Mr. Lloyd Ferguson, Westinghouse Learning Corp. — Chelsea A
Demonstration Classroom Situation:
Individualization of Instruction - Project Plan (extended time period)

Lunch — 12:00pm-2:00pm

SESSION IX

2:00pm-3:15pm

Dr. Joseph Lipson, University of Illinois at Chicago Circle — Loire 4 and 5
Discussion: *"National Institute for Innovations in Education"*

Mr. John Dow, Chelsea B
Research for Better Schools
Individually Prescribed Instruction - Program in Mathmatics

Mr. John Stefani, Chelsea A
Project S.P.O.K.E.
"The Preparation of Differentiated Learning Packets for Individualizing Instruction"

Dr. Gaye McGovern, Albert Hall
Syracuse Public Schools
"LAPs: *A Vehicle for Individualizing Learning in Secondary Schools"*

Mr. Roger Aubrey, Albert Hall
Brookline Public Schools
"School - Community Drug Prevention Program"

Dr. Allan Glatthorn, Loire 2 and 3
Alternative Schools Project
"Individualized Instruction"

Dr. and Mrs. Charles Raebeck, Albert Hall
Dowling College
Workshop in Human Relations

SESSION X

Georgian A 3:30pm-4:45pm

Introduction: Mr. Angelo Alex. Cialdea
Westinghouse Learning Corporation

Speaker: Dr. James Mac Connell,
Davis, Mac Connell Ralston
"Learning Alone While Working Together"

SPEAKERS

ROBERT H. ANDERSON
PROFESSOR OF EDUCATION
GRADUATE SCHOOL OF EDUCATION
HARVARD UNIVERSITY
CAMBRIDGE, MASS.

Robert H. Anderson is Professor of Education in the Graduate School of Education, Harvard University. A native of Milwaukee, Wisconsin, he holds two degrees from the University of Wisconsin and the Ph.D. from the University of Chicago. He was a classroom teacher in Wisconsin prior to World War II, in which he served as an officer in the Navy Supply Corps. He was principal of a K - 8 school in River Forest, Illinois for two years, after which he served as Superintendent of Schools in Park Forest, Illinois between 1949 and 1954. He joined Harvard's faculty in the summer of 1954, and was appointed in 1959 to the "senior faculty". His was the first professorship in Harvard's history in the field of elementary education. He is currently acting as chairman of the faculty in Harvard's Administrative Career Program, while continuing to work with doctoral students in Curriculum and Supervision.

Dr. Anderson is active as a speaker, consultant, and author. His major publications include Teaching in a World of Change (1966), The Nongraded Elementary School (co-authored with John Goodlad), and two chapters in Team Teaching (edited by Shaplin and Olds). He has three books scheduled for publication during 1970 (two of these in England). His writings have been translated into several other languages (particularly Japanese), and he has been a consultant or speaker in Canada (3 Provinces), Europe (7 countries), the Caribbean (Jamaica, Barbados, Puerto Rico), the Middle East (Lebanon and Saudi Arabia), the Far East (Singapore, Taiwan, Japan), Australia and New Zealand. Since 1946 he has also worked professionally in 41 of the United States.

Both of Dr. Anderson's sons attended Dartmouth College, one in the Class of 1966 and the other, 1971. His older daughter graduated from Skidmore College (1968) and a younger daughter is a freshman at college in Madison, Wisconsin. Mrs. Anderson directs a cooperative nursery school in Winchester, and one of Dr. Anderson's special interests is the field of early childhood education. He is chairman of the Educational Advisory Committee of Children's World, Inc., with home offices in Dallas, Texas. Since 1968 he has also been associated with Houghton Mifflin Company as an editorial adviser for college textbooks in Elementary and Early Childhood Education.

ABSTRACT: Humanizing Instruction for Realistic Learning

by Robert H. Anderson

(Summary of presentation by Robert H. Anderson of Harvard University, November 9. 1971)

Children learn in various ways: from things, from people, and from actions. One key to humanizing education is to do a far better job in assessing the learning style, the life style, and the "readiness" of each child.

One way to humanize a school, and to make more realistic learning possible, is to organize it properly. Although organization is itself no guarantee of good education, certain organizational elements have been found to be more effective in delivering educational services to children with different notes and styles of learning and varying levels of motivation. These include "nongradedness" (which is chiefly a philosophy honoring individual difference); multi-age groupings to insure heterogeneous as well as homogeneous pupil clusters; cooperative teaching; and open-space physical settings.

It is neither humane nor efficient to rely on text book-dependent curricula and fixed courses of study based primarily on one learning medium. Multi-media approaches, with flexible structure so that each child has in effect his own separate curriculum, must be adopted. Much more time should be provided for the creative and expressive arts, for examination of controversial issues, for health and personal development, and for exploring life pursuits.

More pupil-pupil interaction, including that which occurs when pupils tutor and assist other pupils, must be encouraged. Competitive-comparative marking systems must be virtually eliminated. A more flexible yearly calendar must be adopted, and more "education" should occur outside the walls of the school. The school should shed the policies and practices that have caused some critics to compare them with penal institutions.

Much overlooked in discussions of humanization is the need for teachers themselves to live richer and more "humane" lives. Unless the adults in the school are also learning a lot, interacting with themselves in lively and productive ways, and generally illustrating "the good life" in their behavior as the children see it, then we have little reason to expect the children to be inspired.

ROGER F. AUBREY
DIRECTOR OF GUIDANCE
BROOKLINE, MASS.

Roger F. Aubrey has been a teacher, counselor, administrator, research director and consultant at different levels of instruction (Coconut Grove, Florida, University of Chicago Laboratory Schools, Wisconsin State University, Public Schools of Brookline and the University of Maine). Presently, he, is devoting much of his time on a research study in applications of drug on our youth of today. Mr. Aubrey has been and is the spear-head for the Kennedy Committee on Drug Prevention in Mass. He has given endlessly of his time and energy towards promoting and aiding counseling organizations throughout New England. Presently he is Director of Guidance at the Brookline Public Schools, Brookline, Mass.

He holds a B.A., M.A. in psychology with work taken at the University of Miami, University of Illinois and has finished his course work towards his PH.D at the University of Chicago in human development, guidance and counseling.

His research has been extensive in the field of guidance. At present he has three publications that will be appearing on the educational scene next Spring: Experimenting With Living: Pros and Cons:, School Counseling: A Personalized Approach, and Guidance Prespectives: Counselor Involvement Practices.

Roger Aubrey is also candidate for president A.C.E.S. (Association for Counselors of Education and Supervision), a division of the American Personnel and Guidance Association.

ABSTRACT

Reordering Educational Priorities to Accomodate the Personal Development of Students

It has been charged by some that in the schools today "only when there is interference with intellectual development do the personal and emotional aspects of human development receive attention." Some noted educators, such as Benjamin Bloom, have even suggested that "under some conditions the development of cognitive behaviors may actually destroy certain desired affective behaviors." This presentation will explore the current situations in elementary and secondary schools regarding the allocation of time, facilities, and resources for the personal development of students. It will be suggested that the personal development of students, as evidenced in the instructional program, is negligible. Suggestions and examples of how the balance between cognitive and affective objectives might be achieved will be presented.

School-Community Drug Prevention Programs

The naivete of students and young people sampling drugs in the country today is matched only by the fantasies of adults who imagine this problem can be easily solved. Unfortunately both groups err in oversimplifying the etiology and remedy of this concern. This presentation will explore a number of factors accounting for the ever-shifting papameters of the drug scene and the problem in gaining perspective in this area. In addition, the factors involved in why individuals turn to drugs and how early intervention might reduce this attraction will be analyzed. Finally, a ten point operational school-community program to control drug abuse will be presented.

PUBLICATIONS OF ROGER F. AUBREY

1965

"Dynamic Programming to Meet Individual Difference in the Junior High School." Cook County Digest, Volume XXVIII, Number 1 (January, 1965), pp. 9-12.

1966

"An Approach to Resolving Organizational Role Conflict Through Non-Threatening Intervention." University of Chicago Industrial Relations Center, Chicago, Illinois, 1966.

"American Bar Center Study Preliminary Research and Bibliography." University of Chicago Industrial Relations Center, Chicago, Illinois, 1966.

1967

"The Effect of Counselors on the Reward System of Teachers." Personnel and Guidance Journal, Volume 45, Number 10 (June, 1967), pp. 1017-1020.

"Elementary School Counseling Practicum: Some Suggestions for Experiences and Expectations." Counselor Education and Supervision, Volume 7, Number 1 (Fall, 1967), pp. 13-19.

"The Legitimacy of Elementary School Counseling: Some Unresolved Issues and Conflicts." Personnel and Guidance Journal, Volume 46, Number 4 (December, 1967), pp. 355-359.

1968

"Discord in Teacher-Conuselor Relations." A review of a book by Gerald Kushel in the Personnel and Guidance Journal, Volume 46, Number 5 (January, 1968), pp. 509-513.

"What is the Role of the Elementary Teacher?" Elementary School Journal, Volume 68, Number 6 (March, 1968), pp. 277-283.

"Guidance for All Children: Slogan or Reality?" Elementary School Guidance and Counseling Journal, Volume 2, Number 4 (May, 1968), pp. 243-252.

"The Legitimacy of Elementary School Counseling: Some Unresolved Issues and Conficts." Chapter in School Counseling: Perspectives and Procedures, by Peters and Bathory, Peacock Press: Itasca, Illinois, 1968, pp. 396-402.

"Last Tag!" In Letters to the Editors, Personnel and Guidance Journal, Bolume 46, Number 10 (June, 1968), pp. 1012-1013.

"Is Your Child Ready for Kindergarten?" Interview in the Sunday Chicago American, Section III, September 1, 1968, pp. 1-4.

1969

"What is the Role of the Elementary Teacher?" Mental Health Digest, Bolume I, Number I (January, 1969), pp. 21-22.

The Learning Disability Child (Editor) The University of Chicago Laboratory Schools: Chicago, Illinois, April, 1969.

"Student Drug Use and the Responsibility of Guidance Personnel." Focus on Guidance, Volume 2, Number 2 (October, 1969), pp. 1-16.

"Misapplication of Therapy Models to School Counseling." Personnel and Guidance Journal, Volume 48, Number 4 (December, 1969), pp. 272-278.

1970

"The Counseling of Underachievers." Focus on Guidance, Volume 2, Number 5 (January, 1970), pp. 1-12.

Testimony before Special Senate Subcommittee on Alcholism and Narcotics. Federal Drug Abuse and Drug Dependence Prevention, Treatment and Rehabilitation Act of 1970, U.S. Government Printing Office, April 10, 1970, pp. 671-672, 676, 680.

"The High School Student: Understanding the Treating His Emotional Problems." A review of a book by Morris A. Sklansky (et al), in the Personnel and Guidance Journal, Volume 49, Number 1 (September, 1970), pp. 69-72.

"Intervention Strategies for Guidance." Focus on Guidance,Volume 3, Number 2 (October, 1970), pp. 1-12.

"Perspectives on the Current Drug Scene." National Association of College Admissions Counselors, Volume 15, Number 3 (November, 1970),pp. 24-26.

1971

"Techniques of Improving Counseling Skills." Focus on Guidance, Volume 3, Number 6, (February, 1971), pp. 1-12.

"Drug Education: Can Teachers Really do the Job?" Teachers College Record, Volume 72, Number 3 (February, 1971), pp. 415-422.

"And Never the Twain Shall Meet: Counselor Training and School Realities." Submitted to: Counselor Education and Supervision, May, 1971.

"Counseling: Philosophy, Theory and Practice." A review of a book by Dugald Arbuckle in the Personnel and Guidance Journal, Volume 49, Number 10 (June, 1971), pp. 847-848.

"Planning School Community Drug Prevention Programs." Personnel and Guidance Journal, Volume 50, Number 1 (September, 1971), pp. 18-24.

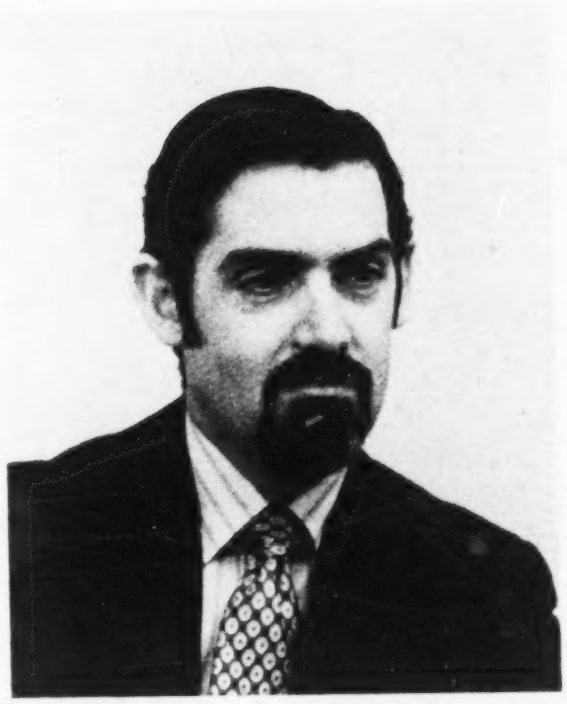
"Misapplication of Therapy Models to School Counseling." Chapter in Philosophical Guidelines for Counseling, by Carlton E. Beck (Ed.). William C. Brown Company: Dubuque, Iowa, 1971, pp. 202-208.

Experimenting With Living: Pros and Cons. To appear in the Winter of 1972. Columbus, Ohio: Charles E. Merrill Publishing Company.

School Counseling: A Personalized Approach. To appear in the Fall of 1972. Co-authored with Herman J. Peters. Itasca, Illinois: F.E. Peacock Publications Inc.

Guidance Perspectives: Counselor Involvement Practices. To appear in the Winter of 1972. Co-authored with Herman J. Peters and Richard Dunlop. Denver, Colorado: The Love Publishing Company.

"Utilizing Guidance Manpower to Combat Drug Abuse." Focus on Guidance, Volume 4, Number 6 (February, 1972).



LLOYD K. BISHOP
ASSOCIATE PROFESSOR OF EDUCATION
ADMINISTRATION
NEW YORK UNIVERSITY
NEW YORK, NEW YORK

Lloyd K. Bishop has been a high school principal, college instructor, lecturer, and consultant at different levels of instruction (Claremont High School, Claremont Graduate School, University of California). Presently, he devotes much of his time to research in psychological environment of disadvantaged urban schools. Dr. Bishop has been proclaimed a leader in the field of flexible modular scheduling. He has recently published a book on flexible scheduling.

He holds an A.B., M.A., and Ph.D. with work taken at Brigham Young University, Claremont Graduate School, and Stanford University.

Dr. Bishop's articles and publications have covered such diverse topics as flexible scheduling, non-graded team approach, staff differentiation and organizational structure for teachers.

PUBLICATIONS BY LLOYD K. BISHOP

Texts:

The Flexibly Scheduled High School (with W.D. Wiley)
Parker Publishing Co., 1968.

Individualizing Educational Systems, Harper & Row,
Publishers, 1971.

The Principal and the New Technology, Harper & Row,
in progress.

Monographs:

"An Independent Study Program," CUSD, 1967
"Why Flexible Scheduling?" CUSD, 1967
"Guidance or Counseling? Role Analysis for Modern
Secondary Schools," CUSD, 1968
"Independent Study: One Dimension of Individualizing Instruction,"
Journal of Individualized Instruction, 1967.
"A Nongraded, Team Approach to Elementary Instruction:
A proposal for elementary schools," New York Univ., 1968.

Magazines:

"Organizational Structure, Teacher Personality Characteristics
and their Relationship to Organizational Climate," Administrative
Science Quarterly, (with J.R. George) in press.

"Staff Differentiation: A Model for Staff Utilization and Professional
Development," The High School Journal, 1971.

"Career in the Classroon: A model for Urban Staff Differentiation"
(with P.W. Carlton) Urban Sociology, in press.

"Individualizing Educational Programs: A Challenge for the Seventies,"
Business Education Forum, NBEA, 1971.

"Individualizing Instruction, The Teacher's Dilemma,"
Business Education Review, 1971.

"Flexible Scheduling: Rationale and Design," Business Education
Review, 1971.

"Staff Differentiation: Toward Professional Behavior and Teacher
Accountability," NYU Education Quarterly, Spring 1971.

"Bureaucracy and Educational Change," The Clearing House, 1970.

"The Teacher; Developing a Climate for Professional Behavior," ISR Journal, 1969.

"Computerized Modular Scheduling: A Technical Breakthrough for more Flexible School Programs, Kappa Delta Pi Record, 1968.

"Individualizing Instructional Programs," The Clearing House, 1967.

PAUL F. BRANDWEIN
VICE PRESIDENT
HARCOURT, BRACE AND JOVANOVICH, INC.

Paul F. Brandwein has been a teacher, supervisor, administrator and consultant at different levels of insturction (Forest Hills High School, New York University, Columbia University, Harvard University). Presently he devotes much of his time to research in theory of teaching and into Piagetian systems as well as consulting internationally with school systems on various aspects of instruction. He is presently Vice President and Director of the School Department Harcourt, Brace and Jovanovich.

He holds degrees A.B., M.Sc., and Ph.D. in Biology, with work taken at New York University, Columbia and Brooklyn Botanical Gardens. He also holds a D.Sc. (Honorary) from Colorado College. He was a Burton Lecturer at Harvard, an Abbott Lecturer at Colorado College and the Harris Lecturer at the University of the Pacific.

His research is directed towards developing a total curriculum for the elementary school. Towards this end he has been architect and senior author of two programs of instruction and learning in the elementary schools: Concepts in Science (for the sciences) and The Social Sciences: Concepts and Values (for the Social Sciences). Presently he is at work on Concepts and Ideals in the Humanities, a series which orchestrates literature, music, art, dance, and drama for elementary school children.

PUBLICATIONS OF PAUL F. BRANDWEIN

Textbooks, monographs, laboratory manuals, papers in Biological Research (on physiologic races in the cereal fungi) and Science Education (mainly on giftedness), films, and filmstrips. Titles of books of special interest include:

NOTES TOWARD A GENERAL THEORY OF TEACHING

TOWARD A DISCIPLINE OF RESPONSIBLE CONSENT: ELEMENTS IN A STRATEGY FOR TEACHING THE SOCIAL SCIENCES IN THE ELEMENTARY SCHOOL (the Abbott Memorial Lecture, Colorado College);

ELEMENTS IN A STRATEGY FOR TEACHING SCIENCE IN THE ELEMENTARY SCHOOL (the Burton Lecture)

THE GIFTED STUDENT AS FUTURE SCIENTIST

A GUIDE TO WORKING WITH POTENTIAL BIOLOGISTS

THE PHYSICAL WORLD

THE WORLD OF SCIENCE

TEACHING HIGH SCHOOL SCIENCE: A BOOK OF METHODS

TEACHING HIGH SCHOOL SCIENCE: A SOURCEBOOK FOR THE PHYSICAL SCIENCES

TEACHING SCIENCE THROUGH CONSERVATION

CONCEPTS IN SCIENCE and THE SOCIAL SCIENCES: CONCEPTS AND VALUES, two 10-year programs of instruction from kindergarten through the ninth level. (The programs include textbooks, laboratory equipment and apparatus, laboratory manuals, teacher's editions, workshops, laboratory cards - "Invitations to Investigate" - and tests.) At present, he is working on a series: CONCEPTS AND IDEALS IN THE HUMANITIES, for the elementary school.

JOHN BREMER

DEAN, COLLEGE OF THE SACRED HEART

NEWTON, MASS.

John Bremer was born in England and originally came to the United States as a Fulbright Fellow in 1951. He has graduate degrees from the University of Cambridge, the University of Leicester and St. John's College; he has also worked with the Tavistock Institute of Human Relations. In 1965, he became a memeber of the British School of Archaeology in Athens, and was elected a Fellow of the Royal Geographical Society in 1966. He is the recipient of awards from the American Institute of Architects and Outstanding Educators.

Since 1946, when he taught in a one-room elementary school, he has had a wide experience in education at all age levels and in all types of institutions. From 1962 to 1966, he taught in the University of Leicester, Graduate School of Education, working with prospective and practicing teachers in the Leicestershire Plan Schools, developing new methods of teacher training and new approaches to learning.

In 1968, John Bremer went to Philadelphia and created the Parkway Program - the original "School without walls", and served as its first Director. Prior to that he had been superintendent in one of the three experimental, demonstration, decentralization districts in New York City.

In 1971, he became Academic Dean of Newton College of the Sacred Heart, where he is also Director of the Institute of Open Education and Professor of Philosophy and Education. The College has put into effect a new graduate program which he designed and which was written up in the Phi Delta Kappan.

During the year 1971-72, four books by John Bremer will be appearing. "School Without Walls: Philadelphia's Parkway Program" and "Open Education for Beginners", both co-authored, and published by Holt. "A Matrix for Modern Education" and "Open Essays in Education" will be published by Dryden.

ARTHUR C. CLARKE
AUTHOR

Born in England in 1917, Arthur C. Clarke is a man of truly diversified and remarkable achievements. An authority on space travel, he is the winner of the Franklin Institute's Gold Medal (1963) for having originated the communications satellite in a technical paper published in 1945.

In 1962, he was awarded the $2,800 UNESCO Kalinga Prize for science writing. In 1965, he won two Aviation/Space Writers Association awards for his LIFE article on the history and future of communications satellites. In 1969 he shared an Oscar nomination with Stanley Kubrick for the screen-play of "2001: A Space Odyssey."

A top-ranking science writer and "a master of science fiction" (The New Yorker), Mr. Clarke is the author of 40 books, both non-fiction and fiction, 10 million copies of which have been printed in some 30 languages. The latest (1968) is the Book-of-the-Month Club selection, "The Promise of Space." He is now writing the preface and epilogue to the astronaut's own book of the Apollo mission.

In addition to "2001: A Space Odyssey," which was inspired by one of his short stories "The Sentinel," Mr. Clarke wrote, with the editors of LIFE, "Man and Space" (1964).

His non-fiction works began to be published in the early 1950's, and revised editions have appeared with regularity. The titles of these books include: "Interplanetary Flight," "The Challenge of the Spaceship," "The Challenge of the Sea," "Profiles of the Future," and "Voices from the Sky."

Mr. Clarke's science fiction has been spectacularly successful and has gone into many editions. The titles of these books are:

"Islands in the Sky," "Prelude to Space," "Against the Fall of Night," "The Sands of Mars," "Childhood's End," "Expedition to Earth," "Earthlight," "Reach for Tomorrow," "The City and the Stars," "Tales form the White Hart," The Deep Range," "The Other Side of the Sky," "A Fall of Moondust," "Tales of Ten Worlds," "Dolphin Island," and "Glide Path."

Several omnibus collections of his fiction have appeared: "Across the Sea of Stars," "From the Ocean, From the Stars," and "Prelude to Mars."

The mysteries of the sea, however, fascinate Clarke as much as those of outer space. Since the early 1950's he has been exploring the deeps of Australia and Ceylon with his partner in skin diving, Mike Wilson, a film producer and under-water photograper. An underwater expedition by Clarke and Wilson to the Great Barrier Reef of Australia in 1954 and 1955 was chronicled by Clarke in "The Coast of Coral," with photographs by Wilson. Underwater adventure around Ceylon was the subject of "The Reefs of Taprobane." His interest in the sea was also reflected in "Voice Across the Sea." With Mike Wilson he wrote "The Treasure of the Great Reef" about the successful expedition undertaken in 1963 by Clarke, Wilson, and others in search of a sunken ship in the Great Basses Reef of Ceylon, where they discovered a ton of silver coins.

Other collaborations between Clarke and Mike Wilson were the juvenile non-fiction books "The First Five Fathoms, " "Boy Beneath the Sea," "Indian Ocean Adventure," and "Indian Ocean Treasure."

Arthur Clarke's articles have been published widely, including such periodicals as Reader's Digest, Holiday, Playboy, Look and The New York Times Magazine.

A graduate of King's College, London, with First Class Honors in Physics and Mathematics, he is past Chairman of the British Interplanetary Society and a member of the Academy of Astronautics, The Royal Astronomical Society, and many other scientific organizations.

In the face of all these attainments, Arthur C. Clarke is not one to lose his sense of humor and balance. Where other men may be didactic about scientific matters, he is likely to come up with such a witty truth as what he once called "Clarke's Law." This is (and we quote):

"When a distinguished but elderly scientist states that something is possible, he is almost certainly right. When he states that something is impossible, he is very probably wrong."

GEORGE CURETON
READING CONSULTANT
WYANDANCH, L.I., NEW YORK

George Cureton survived the rigors of Newark's ghetto public schools to go on to North Carolina Central University, Seton Hall University and Newark State Teachers College. He then returned to his old school community to teach grades one through twelve in the Newark Public School system during the years from 1954 to 1969.

Mr. Cureton was appalled to find that many of his junior high school students were unable to read. He began the laborious task of research into why can't these students read?

Mr. Cureton's unrelenting research was not in vain - for he has now perfected a reading program which related reading skills to the environmental impacts of the ghetto child's life realities.

During 1970, the Cureton Method of Reading brought recognition from the President of the United States who appointed Mr. Cureton to his National Educational Advisory Committee.

MR. GEORGE O. CURETON, New Jersey Teacher of the Year and one of five American teachers named as finalists for the 1969 National Teacher of the Year Award sponsored by LOOK Magazine in cooperation with the Council of Chief State School Officers.

Mr. Cureton -- a first-grade teacher at Morton Street Elementary School, Newark, New Jersey -- has taught for twelve years, in every grade from first through ninth.

CLARK T. DONLIN
ASSISTANT SUPERINTENDENT FOR
CURRICULUM AND INSTRUCTION
METUCHEN, NEW JERSEY

Mr. Clark Donlin is presently Assistant Superintendent for Curriculum and Instruction at the Public Schools of Metuchen, New Jersey. He received his undergraduate degree at King's College, Wilkes-Barre, Pennsylvania. Mr. Donlin did much of his graduate studies at Temple University and Rutgers University in the state of New Jersey. He was awarded his Masters in Education at Newark State College and studied under the Ford Foundation for the entire degree program.

He has wide experience in teaching and has been in an administrative level in such schools as Madison Township High School, Grenlock Terrace Elementary and Churchill Junior High School in the state of New Jersey.

Mr. Donlin is an outstanding speaker on such subjects as modular scheduling, the systems approach, and Behavioral objectives as approaches to curriculum development. He actively participates in many professional associations such as American Association of School Administrators, Association for Supervision and Curriculum Development and the National Association for the Individualization of Instruction.

ABSTRACT: Strategies for Realistic Staff Development

by C.T. Donlin

The 1960's might well be termed the era of the innovations explosion in American education. Triggered by the launching of Sputnik I and the federal funding titles, schools were prodded to overcome the inertia of the status quo. The literature, the devices, the strategies and the programs of the 1960's are history. We are certain of one thing and that is innovations abound!..... literally hundreds and thousnads of what-have-you's across the whole spectrum of education from the nersery school to the university. Implicit in our dilimmas in education is the fact that only a minute portion of innovations have been directed toward improving teacher training programs and improving professional development programs of staff members in active service. Herein lies the thesis of Strategies for Realistic Staff Development. Training programs past and present have been woefully inadequate in preparing teachers who can effectively respond to the needs of young people. Some states are experimenting with performance-based criteria for certification. Some universities are centers for experimentation in developing new teacher training strategies. America has a generation of school children that cannot wait for the development of a new generation of teachers who have been trained to cope effectively with their needs. A seeming dichotomy exists when we see these inadequacies and needs on one hand and the innovations on the other.
What can the schools do with our present generation of educators, tenured and many years from retirement, whose training and competency leaves something to be desired.
What can the local district do, living with the realities of today's economy and the financial constraints of implementing differentiated and other staffing arrangements.
Mr. Donlin will address himself to these issues and attempt to direct the thinking of the educator to those alternatives that can realistically lead to the development of today's professional staff, which can then better respond to the needs of our young people.

JOHN A. DOW
DEPUTY DIRECTOR
INDIVIDUALIZING LEARNING PROGRAM
RESEARCH FOR BETTER SCHOOLS, INC.
PHILADELPHIA, PA.

Dr. John A. Dow's present position is with Research for Better Schools. He is deputy director in the Individualizing Learning Program. Dr. Dow previously was with the Fresno County Department of Education, firstly as a teacher and then principal and director. He also was Assistant Superintendent of Planning and Development at Santa Clara University School District.

Dr. Dow received his B.A. and M.A. at Fresno State College. He was awarded his M.Ed., Ed.D. in administration and curriculum development at the University of Southern California.

LLOYD FERGUSON
REGIONAL MANAGER
PROJECT PLAN
WESTINGHOUSE LEARNING CORP.

Mr. Lloyd Ferguson is presently Eastern Regional Manager, Project PLAN, Westinghouse Learning Corporation. PLAN is an acronym which stands for "Program for Learning in Accordance with Needs".

PLAN is a cooperative program in computer managed indivualized instruction which was initiated by Westinghouse Learning Corporation, the American Institute fcr Research, and 14 independent school districts in 1967.

Mr. Ferguson's task as PLAN regional manager extends from district wide proposals for individualizing instruction, administrative and staff training program implementation and public relations to alternative evaluation designs.

Prior to coming to the Westinghouse Learning Corporation Mr. Ferguson was an educational consultant concurrently with the MITRE Corporation and Arthur D. Little, Inc. During his employment with these firms he was involved in a number of studies with the U.S. Office of Education and numerous private firms in the application of computer technology to education.

He is a graduate of the School of Education, University of Michigan, and holds advanced degrees in Education and Public Administration from Salem State College, Massachusetts, and the University of Michigan. He received research fellowships from the Institute of Public Administration, University of Michigan and Harvard Graduate School of Business Administration to study educational administration.

He had published a number of articles and a book concerning business and computer applications to educational administration and curriculum designs.

MURIEL GERHARD
ASSIT. SCIENCE SUPERVISOR
NORWALK PUBLIC SCHOOLS
NORWALK, CONN.

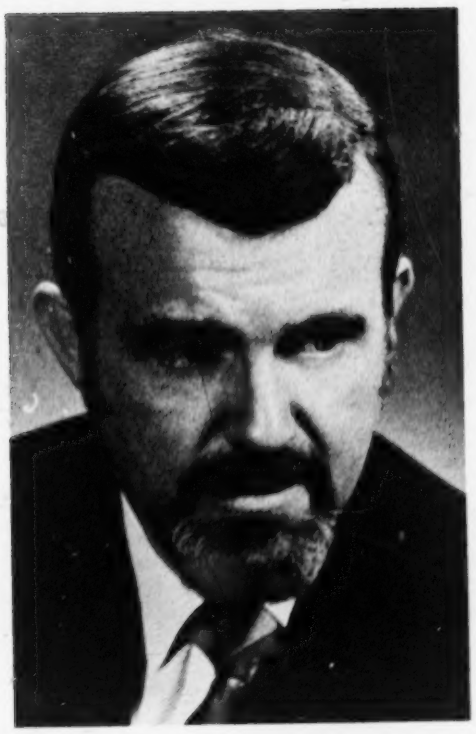
Muriel Gerhard is currently the Assistant Science Supervisor for the Norwalk Connecticut Public Schools. Previously, she served as Co-Director, in charge of Planning and Instruction for Project A.M.P., a regional program training teachers in the individualization of instruction. Preceding Project A.M.P., she served as Coordinator of the Behavioral Outcomes Program in the Norwalk School System. The productive results of this program led to a lengthy feature article in Grade Teacher Magazine and ultimately to a book, Effective Teaching Strategies With The Behavioral Outcomes Approach, which has attained widespread distribution in public school systems, colleges and universities here and abroad. Mrs. Gerhard received her B.A. from Brooklyn College, her Masters from New York University and her Sixth Year Certification from Fairfield University. She plans to continue her studies. In 1965 she was instrumental in developing the Behavioral Outcomes Research Study, received funds from The Fund For The Advancement Of Education of the Ford Foundation and served as the Project Director of the program untilits completion in 1967. The results of the research study served as the basic structure of Project A.M.P. which utilizes the Behavioral Outcomes Approach in an individualizing frame-work.

Mrs. Gerhard has served and continues to serve as a consultant to many school systems, has written numerous articles on various aspects of BOA and has been a speaker at national, state and local conventions as well as a guest lectured at universities.

ABSTRACT: Cognitive Strategies and Cognitive Curricula

by Muriel Gerhard

The focus will be on the use of cognitive strategies and the development of cognitive curricula which serve to promote PROCESS SKILLS in today's pupils. Major aspects will include essential cognitive skills, the creation of responsive environments, BOA strategies, the centrality of specific behavioral objectives, individualizing instruction with BOA, the modification of current curricula and the evaluation of cognitive classrooms.



ALLAN A. GLATTHORN
DIRECTOR, ALTERNATIVE
SCHOOL PROJECTS
ELKINS PARK, PA.

Allan A. Glatthorn, an administrator in public education for many years now comes to us in a totally new capacity, that of Director, Alternative School Project. This new project is funded under a title III grant and conceptualizes on the concept of randomly selecting students from different school districts and allowing the students to use society as it's classroom.

Allan Glatthorn, in 1967 was appointed to the National Council of Humanities, a Presidential appointment, and in the Fall of 1968 was awarded a Whitehead Fellowship at Harvard University.

His articles have covered such diverse topics as the humanities, independent study, small group learning, student protest, and civil disobedience. He is the co-author of several books including Composition: Models and Exercises (2 volumes), plus a literature text and linguistic series in progress.

He holds A.B., M.Ed., and D.Ed. in English and Administration, with work taken at Temple University, University of Pennsylvania, University of Chicago and Harvard University. In 1962 he was a John Hay Fellow at the University of Chicago.

PUBLICATIONS OF ALLAN GLATTHORN

PROFESSIONAL PUBLICATIONS

ARTICLES:

"Time for a Change," PSEA Journal, 1950
"Dedicating New School," American School Board Journal, 1957
"Family Life Education in Pennsylvania High Schools," Doctoral Dissertation, 1960
Yearly articles in Yearbook of Associated Public School Systems, 1956-59
Several short articles in magazine Know-How
"That's No Joke, Son," CSPA Adviser's Journal, January, 1955
"There's Hope in the Humanities," PSEA Journal, October, 1962
Weekly educational news column in Times Chronicle, 1956-57
"Reducing Pressures," School Management, April, 1966
"Take Advantage of the Honeymoon," Exchange, January, 1966
"The 9-10 School," Educational Leadership, January, 1966
"Independent Study for all Students," Phi Delta Kappa, March, 1966
"Learning in the Small Group," Change in Secondary School Administration, Ovard, 1967
"Some Hints from a High School Principal," Youth Ministry Notebook, 1968
"How to Sabotage 'Teacher-Proof' Curricula," The Bulletin, Nassp, May, 1968
"Civil Disobedience," Today's Education, November, 1968
"What Place for Controversy," The Bulletin, NASSP, September, 1966
"Student Protest," School Management, November, 1968
"The Principal and the Student Council," The Bulletin, NASSP, October, 1968
Book Review on "Middle School," Educational Leadership, January, 1969
Book Review on "Independent Study in Secondary Schools," Educational Leadership, March, 1969
"Individual Self-Fulfillment in the Large High School," The Bulletin, NASSP, March, 1969
"From Rebellion to Reconstruction," PSEA Journal, April, 1969
"What Makes an Effective High School," Parents' Magazine, September, 1969
"Pick Your Fights," American Junior Red Cross Journal, October, 1969
"A Little Bit of Rebellion is Good for the Soul--and the School," Seventeen, August, 1969
"A New Council for a New Age," The 1969 Yearbook, NASSP, Washington, D.C.
"Old Myths and New Opportunities," New York City Education, Issue No. 5, Fall, 1969
"The Small Group," Encyclopedia of Education. (To be published in 1971.)
"The Story of North Campus," Entelek, Inc. (To be published in 1971
"The 'New School' Explosion and the Part You Can Play," Youth Magazine, April, 1970

PROFESSIONAL PUBLICATIONS

ARTICLES:

"The New Catechism," Youth Magazine, April, 1970
"Student Indifference: It's More of a Danger Than Activism," Ohio Schools Magazine, February 27, 1970
"Goodbye—Forever—Mr. Chips," Parents Magazine, 1970
"A Response for the Seventies," SCRIBE, Vol. 8, No. 3, March, 1970, Penna. State Education Association.
The Seventies—Society, Student, and School, Croft Education Services, Inc., 1970
"Fads," Teachers' Handbook (To be published 1971.)
Book Review on "The Emergent Middle School," Educational Leadership, October, 1970
"Learning in the Small Group" (chapter 7, pp. 104-117) Selected Readings for the Introduction to the Teaching Profession, edited by Milton Muse.
Book Review on "Crisis in the Classroom," The Bulletin, NASSP, December, 1970

BOOKS:

Five American Adventures, Harcourt, Brace and World Publishing Company, eighth grade literature book, co-authored with Clifton Fadiman, 1963.
The Next Five Years, Interstate Press, book on college admissions, co-authored with Dr. Carl J. Manone, 1965
Composition: Models and Exercises, Grade 10, co-authored with Harold Fleming, Harcourt, Brace and World Publishing Company, 1965
Composition: Models and Exercises, Grade 11, co-authored with Company, 1965
Consultant and Contributor to English Grammar and Composition, Grades 9, 10, and 11, published by Harcourt, Brace and World Publishing Company, 1965
Ideas and Patterns in Literature, Book 2, Harcourt, Brace and World Publishing Company, 1970
Dynamics of Language, D.C. Heath and Company, a grades 7-12 Linguistics series, co-authored with Charles Kreidler, 1971

PROFESSIONAL ACTIVITIES:

English Honorary Society and Dean's List, Temple University
Subject of film made by Pennsylvania State University, 1960-1961 "Teaching Critical Thinking."
Reader for College Entrance Examination Board English Advanced Placement Test and English Achievement Test, 1959-1965.
Judge, National Council of Teachers of English Achievement Award, 1959.
Judge, Pennsylvania Scholastic Press Association.
Reader, Title III, Department of Public Instruction, Penna.
Teacher Education Advisory Committee, Pennsylvania Dept. of Education.
English Advisory Committee, Pennsylvania Dept. of Education.
National Council of Churches of Christ, Task Force on Religion in the Schools.
NCTE Convention, 1963, Chairman of Conference for English Chairmen.
NCTE Awards, 1964-1965, State Chairman.
NCTE Convention Study Group #1, 1964, Chairman
National Council of Humanities (Presidential Appointment) 1967—
Board of Director, National Association for Humanities Education, Fall, 1968
EPDA Panel Member - Administration, Fall, 1968
Chairman, Commission on the Humanities, Association of Supervision and Curriculum Development, 1969—
Member, Eastern Montgomery County Human Relations Advisory Committee.
Director, Oak Lane Day School, 1969-1970.

PROFESSIONAL CONSULTATION:

From 1965 to the present, served in more than one hundred institutes, workshops, and conferences for teachers and administrators. These workshops, held in some thirty states, Canada, and Japan, have been sponsored by state departments, local school districts, professional associations, and private consulting firms.

JAMES LEWIS JR.
DISTRICT PRINCIPAL
WYANDANCH PUBLIC SCHOOLS
WYANDANCH, L.I., NEW YORK

Dr. James Lewis, Jr. is president of the National Association for the Individualization of Instruction. He also serves as the chief school officer of the Wyandanch School District, Wyandanch, New York. He has served in this school district as a teacher, supervisor, principal and district administrator.

He has a B.S. degree, M.S. degree, Ed.D. degree and expects to receive a Ph.D. from Union Graduate School, Antioch College, Yellow Springs, Ohio, this fall.

In 1970-71 Dr. Lewis was the recipient of the Alfred North Whitehead Fellowship for Advanced Study in Education at Harvard University, Cambridge, Mass. He is also listed in Who's Who in the East.

Dt. Lewis is the author of nine major manuscripts, his two most current being "Differentiating the Teaching Staff" and "Developing An Effective Performance Appraisal Program for Educators", both published by Parker Publishing Company, Inc., West Nyack, New York. Recently, he has contracted to write a book entitled: "School Management by Objectives: Ensuring Educational Accountability".

He has also conducted workshops on the nongraded concept, individualization of instruction, a systems approach to instruction, developing behavioral objectives, differentiated staffing, and school management by objectives for numerous public schools, various associations and several colleges and universities. He has appeared on radio and television.

Dr. Lewis is also on the National Advisory Council of the International Graduate School of Education, Denver, Colorado and is a consultant for the Right to Read Program of the U.S. Office of Education.

JOSEPH I. LIPSON
ASSOCIATE DEAN
GRADUATE COLLEGE
UNIVERSITY OF ILLINOIS
CHICAGO, ILLINOIS

Dr. Joseph I. Lipson is an Associate Dean at the Graduate College, University of Illinois. He has a B.S. degree in Physics from Yale University and went on to receive his Ph.D. in Physics from the University of California at Berkeley.

Dr. Lipson has wide experience in the field of Research Physics working with Such colleges as University of California, University of Alberta, University of Pittsburgh, University of Canada and many more.

Dr. Lipson was Director of Curriculum Design Group for the Center of Learning Research and Development, at the University of Pittsburgh with appointment as Research Associate Professor of Geophysics. Dr. Lipson is the author of many publications in the fields of educational design, educational planning and geophysics.

ABSTRACT: The National Institute of Education

by Joseph Lipson

Planning is in progress for a proposed new federal institution intended to give impetus to research and development in education. Legislation creating this agency, the National Institute of Education, has passed the Senate and awaits subcommittee action in the House. Final passage is expected in October of this year. The Institute will report directly to the U.S. Commissioner of Education. Present legislation calls for a 15-man advisory board to advise the Institute director on policy and to represent a broad spectrum of thinking on education.

Work is currently underway to analyze the problems of education, prepare a menu of possible major developmental and research problems, deal with the setup problems, design an effective organization, and arrange for a smooth, humane transition from the present National Center for Education, Research and Development to the National Institute.

The drive to create a special institute comes from a growing concern that educational R & D has not done the job expected of it. People within the education R & D community have called for such an institution to focus and upgrade the work in their field. Difficulties with national programs of change and reform (eg. Headstart) have suggested that a more powerful institution for planning and analyzing change is needed.

In addition, the Nixon Administration feels that if the federal government is to continue to be the source of huge educational support programs, we had better gain a better base of knowledge and a better system of delivering products and new approaches to students.

Plans for the institute focus on the development side of research and development. The concept of development is not well established in the field of education. This is one reason that so few research products and ideas find their way into practice. In the new institute, development teams will design programs, each of which is to have a clearly specified educational impact. The teams will be interdisciplinary - including research scientists from major disciplines, educational R & D people, edicational practitioners, and students. Emphasis on development will generate new, fundamentally different forms of education which will challenge the thinking of people in the educational and social sciences.

The plans include the institute's think tank, a unit of educational studies. Educational studies research would provide the basis for policy decisions for new programs and for changes in emphasis in the development and research programs. The task of this group will be to illuminate the problems of education and to see through current myths surrounding education: to deal with both the forest and the trees. The division is to be organized around new kinds of groupings so that people from many disciplines can focus upon some aspect of education. For example, one group might deal with the study of human interaction. Psychologists, anthropologists, doctors, poets, as well as sociologists and social psychologists, could each bring their own perspective to such a unit within the NIE.

A third division would be responsible for nurturing research and development capability in both individuals and organizations. The current regional laboratories

and R & D centers would be guided and supported by this unit. As institutions for research mature, it is hoped that they will achieve the competence to run full-fledged programs. Such organizations would then interact with all the divisions of the NIE.

There are many implications for teachers, school boards, school districts, state education agencies and commercial research and development firms in the proposed institute. People, proposals and contracting organizations will be sought from the entire spectrum of talent and involvement. Teachers, board members, technicians, artists, scientists, etc., will be contacted and involved in the enterprise.

New relationships with commercial, industrial and profitmaking concerns will be designed at the same time that the productive capacity of industry and commerce is turned on to some of the problems facing education.

The funding level requested by the administration is about 150 to 200 million dollars for the first year (fiscal year 1973). It is hoped that the work of the NIE will justify increases of about 20 percent per year so that the funding level could approach 1 billion dollars within a decade.

MR. EUGENE LISSANDRELLO
DIRECTOR OF ART
CONNETQUOT CENTRAL SCHOOL
BOHEMIA, LONG ISLAND,
NEW YORK

Eugene Lissandrello comes to the NAII Conference bringing in a new dimension to education. Educated at Pratt Institute B.F.A., Columbia University M.A. and post graduate work at New York University. Mr. Lissandrello imparts upon the concept that art is one of the many vehicles by which we can motivate children of today to want to learn.

Mr. Lissandrello is presently the director of art at Connetquot Central School District at Bohemia, New York.

In 1970, Eugene Lissandrello was a Fullbright-Hayes Fellow. He applied his fellowship to study abroad in Italy.

JAMES D. MacCONNELL
CONSULTANT TO THE PRESIDENT
OF WESTINGHOUSE LEARING CORP.
PALO ALTO, CALIFORNIA

Dr. MacConnell is widely known for his work aimed at integrating modern concepts of school construction with principles of child development, curriculum reform and methods of instruction.

Following a variety of educational positions with public schools, universities, The American Youth Commission, and the U.S. Navy, Dr. MacConnell joined the Stanford faculty in 1948. In addition to his teaching assignments, he was associate dean from 1948 to 1953. He formed the School Planning Laboratory at Stanford in 1951 and has served as its director since that time. In 1959, he also became director of the Western Regional Center of the Educational Facilities Laboratories, Inc. and directed its planning activities for the twelve Western States, Samoa, and the Trust Territories. Dr. MacConnell as Director of the School Planning Laboratory and Professor of Education at Stanford has has been responsible for preparing educational specifications for Stanford's proposed $5,000,000 research and Development Center that has recently been funded by the United States Government. He has also been active in South America, directing university and elementary and secondary school planning projects in Colombia and Rio.

Dr. MacConnell is a native of Michigan. He received his A.B. degree and an honorary LL.D from Central Michigan University. He received his Master's and Doctorate degrees from the University of Michigan.

During the Spring of 1967 he visited Australia as a guest of the Commonwealth Government, speaking to Commonwealth and State school officials and architects throughout the continent. As chairman of the Educational Consulting firm of Davis-MacConnell-Ralston, he headed a planning team for planning a college at Hobart, Tasmania. He has been appointed to the position of Senior Advisor to the President of Westinghouse Learning Corporation since their acquisition of

Davis-MacConnell-Ralston. He also represented Stanford's School of Education in planning the American School in Tokyo, Japan, the American School in New Delhi, India. He has recently returned from the Scandinavian countries where he met with architects and school officials in Denmark.

Dr. MacConnell has contributed articles on both school administration and architecture to many professional publications and has written or edited several publications to the School Planning Laboratory. He is also the author of the college text, Planning for School Buildings. He maintains active membership in a number of professional organizations.

GAYE McGOVERN
ASSISTANT DIRECTOR OF
SECONDARY EDUCATION
SYRACUSE PUBLIC SCHOOLS
SYRACUSE, NEW YORK

Dr. Gaye McGovern holds a B.S. and M.A. in Biology with work taken at the University of Pittsburgh, University of Redlands and has completed her Ed. D. at the University of California in Administration.

Dr. McGovern's expertise is in the area of Secondary Administration. As a curriculum generalist, however, her concern has always been tha of a practitioner focuses on the individualized aspects of learning, using whatever vehicle there is to motivate youngsters to achieve. Her research has been extensive in the field of individualized learning in Secondary Schools.

EDWARD C. PINO
SUPERINTENDENT OF SCHOOLS
CHERRY CREEK SCHOOLS
ENGLEWOOD, COLORADO

Dr. Edward C. Pino received his A.B. from Michigan State University; his M.A. work was completed at George Washington University. He completed his doctorate work at Stanford University where he majored in Administration and Supervision.

Dr. Pino was appointed as an honorary delegate to the White House Conference on Education and the following year he was awarded a fellowship to the Aspen Institute for Humanities Studies. He is an acclaimed speaker and author of Granada - Tomorrow's School Today.

The educational environment that surrounded him reflects his ability to reach out to educators and bring to reality the archaic educational philosophies that we have been living and practicing today in our schools.

CHARLES RAEBECK
PROFESSOR OF HUMAN RELATIONS IN EDUCATION
DOWLING COLLEGE
OAKDALE, NEW YORK
and
AUDREY RAEBECK (WIFE)

Charles Raebeck has been a teacher, counselor, special programing and administrator in public schools and colleges in the South, Midwest, and East.

He is the creator of school district-college cooperative elementary and secondary internship programs unique to teacher education in the state of New York. Dr. Raebeck is originator and director of annual human relations workshops for teachers and administrators in the Long Island area. Directorship of such varous State and Federal workshops he has programs in Upward Bound Program, Migrant Workshop and various human relations programs. Dr. Raebeck received his doctorate in Education at Duke University. He is an active member of various institutions such as Member Advisory Board, Walden University, Florida and is also a member of the Board of Trustees, Hampton Day School in New York.

CHARLES F. REASONER
PROFESSOR OF EDUCATION
NEW YORK UNIVERSITY
NEW YORK, NEW YORK

Dr. Charles F. Reasoner, Professor of Education, New York University, received his B.S.c degree from Ohio State University and his master's and doctorate in education from Teachers College, Columbia University. Born in Logan, Ohio, Dr. Reasoner's childhood and youth were spent in Mount Vernon, Ohio.

Dr. Reasoner's expertise is in the areas of children's literature, reading, and the language arts. As a curriculum generalist, however, his concern has always been that of a practitioner who focuses on the individualized learning of each child, regardless of age or grade placement, cultural background, and ability grouping in curriculum subjects.

Professor Reasoner has lectured nationally and has conducted demonstration workshops in which he puts his theory into practice - teacher-teaching, learner-doing - while classroom teachers observe. His emphasis, always, is placed on the child as the individualizer - a decision-maker as well as upon the fact that individualization - at all levels of instruction - exposes, widens, and capitalizes upon differences in educationally desirable ways. Most of all, Dr. Reasoner recognizes the teacher as an individual, too! He urges and helps teachers to develop their own classroom conditions, situations, and approaches in order to reach more learners on a one-to-one basis.

PUBLICATIONS OF CHARLES F. REASONER

"Releasing Children to Literature," Dell publishing Company, Inc. New York: 1968.

"Where the Readers Are," Dell Publishing Company, Inc., New York: 1971 (late Fall)

"Adventuring in Storytelling with Children's Literature," tentively scheduled for publication in Spring 1972.

"Enjoying Literature Visually" in Using Literature with Young Children, Bureau of Publications, Columbia University New York: 1966.

"The Lost Signal" in Listening in the Elementary Classroom, Scarecrow Press. Metuchin, New Jersey: 1971.

SIDNEY P. ROLLINS
DEAN OF GRADUATE STUDIES
RHODE ISLAND COLLEGE
PROVIDENCE, RHODE ISLAND

Dr. Sidney Rollins holds degrees, B.S., M.S., and Ph.D. in orgainzation and administration with work taken at Washington University.

He has been a teacher, administrator, professor, lecturer and consultant. Presently he is Dean of Graduate Studies at Rhode Island College.

Dr. Rollins articles and publications cover such diverse topics as non-graded secondary schools, problems of adolescence, small groups learning, unrest in urban disadvantaged areas.

ABSTRACT: ORGANIZING CURRICULUM MATERIALS FOR INDIVIDUALIZING INSTRUCTION

By

DR. SIDNEY P. ROLLINS

Following a brief description of a set of assumptions relating to the restructuring of the curriculum for an individualized instructional program, Dr. Rollins will present a model for organizing curriculum materials for individualizing instruction. The model, in use in a number of school systems at the elementary and secondary level, resembles what frequently is called a Learning Activity Package.

PUBLICATIONS BY SIDNEY P. ROLLINS

"Let's Tell the People!" High School Journal, Vol. 41, October, 1957, pp. 19-21

"A Public Information Team Tells Our Story," School Executive, Vol. 77, December, 1957, pp. 50-51

"Confounded Unfounded Criticism," Educational Forum, Vol.22, January, 1958, pp. 243-255

"Pressure Groups and Their Influence on Public Education," The Clearing House, Vol. 34, October, 1959, pp. 113-115

"A Survey of Problems of the Principal," Bulletin NASSP, Vol. 44, February, 1960. pp. 55-57

"Automated Grouping," Phi Delta Kappan, Vol. XLII, No.5, February, 1961, pp. 212-214

"A High School Where No One Fails," School Management, Vol. 6 No. 5, May, 1952, pp. 77-79

The Middletown Project: The Development of a Nongraded Secondary School (A Monograph), Division of Graduate Studies, Rhode Isalnd College, Probidence, Rhode Island August, 1962

"What the Schools Must Teach," Feature article on the editorial page of the Providence Journal, January o, 1963

"Ungraded High Schools," The Nation's Schools, Vol. 73, No. 4, April, 1964, pp. 110, 130.

Sidney P. Rollins and W.W. Charters, Jr., "The Diffusion of information among Secondary School Staff Members," Journal of Social Psychology, Vol. 65, 1965, pp. 167-178

"Are Middle Schools the Answer?" Scholastic Teacher, Vol. 18, No. 7, March 14, 1969, pp. 9-11

Sidney P. Rollins and Adolph Unruh, Introduction to Secondary Education, Rand-McNally, 1964

Problems of Adolescence, Chapter I of the 1968 ASCD Yearbook, 1968

Developing Nongraded Schools, Peacock Publishing Company, 1968

Individualized Instruction in Continuous Progress Programs, Info-Pack Cassette Series (10 sides), Instructional Dynamics, Inc., Chicago, Illinois, 1971

KEVIN RYAN
GRADUATE SCHOOL OF EDUCATION
THE UNIVERSITY OF CHICAGO
CHICAGO, ILLINOIS

Kevin Ryan, an Associate Professor of Education at the University of Chicago, pioneered in the field of Micro-Teaching. He is particularly concerned with the problem of beginning teachers as is evident in Don't Smile Until Christmas;Accounts Of The First Year Of Teaching, which he edited. Two other bookds will be in print by December. Those Who Can Teach, is an introductory text which Professor Ryan co-authored with James M. Cooper. Trial Balloons: Selected Readings In Education is an anthology which Professors Ryan and Cooper edited.

Dr. Ryan received a B.A. in Psychology from the University of Toronto (1955); his M.A. in the teaching of English from the Columbia Teachers College (1960); and his Ph.D. in Secondary Education from Stanford University (1966). During 1970-71 he worked at Harvard University as Alfred North Whitehead Fellow. Currently, Dr. Ryan is editing the up coming N.S.S.E. yearbook on teacher education and directing the University of Chicago T.T.T. project. He is 39, married with two children (Hilary 4, Alesandra Kerry 4 mos.) and resides in Chicago.

ROBERT SINCLAIR
PROFESSOR OF EDUCATION
UNIVERSITY OF MASSACHUSETTS
AMHERST, MASS.

Dr. Robert L. Sinclair holds a B.S., M.Ed. in Administration and Supervision from Miami University and did his Doctoral work at the University of California.

In 1966 he was appointed as American Representative to the Fourth International Curriculum Conference and he was also awarded the Washington Fellow and the Kettering Fellow in Education.

Dr. Sinclair's articles cover an array of elementary school philosophies. He has pioneered the research that has been done in identifying enviornmental variables in elementary education.

As a full time professor of Education at the University of Massachusetts, Dr. Sinclair has extended himself to act as member of the Task Force on Education for gubernatorial candidate Kevin White, director, program in curriculum studies, center for Humanistic education, chairman, Title III committee on assessment of educational needs and several other similar type organizations.

PUBLICATIONS BY ROBERT L. SINCLAIR

The Perceptual Reality of Schooling: Inquiry Into Elementary School Educational Environment. Bureau of Curriculum Innovation, Mass. State Department of Education. (In Press)

Behind the Classroom Door : The First Four Years of School, Charles A. Jones Publishing Company, Worthington, Ohio, (in press), (with John I. Goodlad, M. Frances Klein, et al.).

The Principal and the Challenge of Change. Institute for Development of Educational Activities, Los Angeles, 1969, (et al.).

"Through the Eyes of Children: Geist." Building Blocks for Change. Ohio State Department of Education, Columbus, Ohio, Oct. 1971

"Elementary School Educational Environment: Toward Schools that are Responsive to Students." The Elementary School: Humanizing? Dehumanizing? National Association of Elementary School Principals. Washington, September, 1971.

"Elementary School Educational Environment: Toward Schools That are Responsive to Students." National Elementary Principal, Vol XLIX, No. 5, April, 1970

"A Strategy For Educational Improvement." The Massachusetts Teacher, May, 1969

"Leadership Concerns." The National Elementary Principal, Vol. XLVII, No. 1, September, 1968

"Instruction Individualized." Proceeding of the Sixth Annual Conference on Individualized Instruction and the Grouping of Pupils, San Diego, March, 1967

"Elementary School Educational Environment:Measurement of Selected Variables of Environmental Press." Paper delivered at AERA, Los Angeles, 1969

"Theoretical Approach to Identifying Environmental Variables." October, 1969. Commissioned: Massachusetts State Department of Education, Bureau of Curriculum Innovation.

"Educational Environment and Elementary Schooling." Department of Elementary Education, Ohio University. Instructional Leadership Conference. June, 1971.

"Curriculum Phases:Toward Making Curriculum Responsive to Human Differences." Department of Elementary Education, Ohio University. Instructional Leadership Conference. June, 1971

Voices in the Classroom, Peter Schrag. National Elementary Principal, Vol. XLV, No. 5, April, 1966. (Book Review)

"The League of Cooperating Schools:A Strategy for Planned Change." Institute for Development of Educational Activities, Los Angeles, 1967. (Filmstrip)

"The Center for Study of Educational Innovations:A Statement of Intent." 1969. ED 028 113. Educational Resources Information Center (ERIC).

"A Theoretical Approach for Selecting Elementary School Environmental Variables." 1969. ED 028 834. Educational Resources Information Center (ERIC).

"Educational Environment: An Annotated Bibliography." Commissioned: Massachusetts State Department of Education, Bureau of Curriculum Innovation, September, 1970.

"Homelands Trailer Company:A Leadership Case Demanding Situational Insight." Department of Elementary Education, Ohio University Instructional Leadership Conference, June, 1971

JOHN A. STEFANI
DIRECTOR OF PROJECT SPOKE
NORTON, MASS.

Before his appointment to the position of Project Director Mr. Stefani was a principal in the Norton Public Schools. Prior to this he was a teacher and assistant principal in the Quincy Public Schools. He has been Director of Project SPOKE for the past three and a half years.

During the 1966-67 school year Mr. Stefani acted as planning committee chairman of Project SPOKE on a part-time basis.

A graduate of Boston University School of Education, Mr. Stefani received his Master's Degree in 1952. He has done additional graduate work at Boston University, Northeastern University, Boston State College, and Bridgewater State College.

In 1966 Mr. Stefani was selected to participate as a Fellow in the Institute for the Development of Educational Activities held at Amherst College in Amherst, Massachusetts.

Recipient of an N.D.E.A. Institute for Educational Media Specialists, Mr. Stefani attended Bridgewater State College during the summer of 1967.

Mr. Stefani has acted as a consultant for numerous universities, colleges, school districts, and state departments of education.

Mr. Stefani is past president of Mass. PACE, an organization representing all Title III centers in the state of Massachusetts. He is also second Vice-President of the Boston University Chapter of Phi Delta Kappa, an honor society for men in education.

ABSTRACT: The Preparation of Differentiated

Learning Packets for Individualizing Instruction

by John Stefani

Individualizing instruction or tailoring instruction to the individual needs, interests and abilities of students has been a concern of educators for some time. As educators, we have recognized the concept of individual differences for the better part of this century but have made little progress, generally, in designing and implementing instructional programs in the schools of our nation so that each student may reach his full potential. We can no longer excuse our failure to do so because of the lack of competent learning theory or because of the dearth of instructional materials of sufficient quality or quantity. It is rather a matter of freeing ourselves from the yoke of tradition and utilizing the results of research to achieve the goal of providing each student with a learning program appropriate to him as an individual.

The advent of systems techniques and the rapidly developing field of educational technology have provided educators with powerful and effective tools with which to design and carry out programs of individual learning. Project SPOKE is using these tools in the design of in-service programs to train educational personnel in the skills necessary to prepare them for the new roles they will assume in the individualized learning process. SPOKE is also providing necessary support services which must be an inherent part of such programs to ensure their success.

One of the programs developed by Project SPOKE is designed to train teachers to differentiate and individualize instruction for students in grades K-12 through the preparation of SPOKE-PAKS. The latter, also referred to as Differentiated Learning Packets, are defined as self-contained, multi-media, student-oriented units designed to teach a single concept or skill.

Steps in Preparing A SPOKE-PAK

During the training program, teachers are advised to select a particular concept or skill that can be acquired by students in a one to three week period of time. Once selected, these concepts or skills are then translated into precise and measurable terminal and intermediate performance objectives. These objectives are then taxonomically categorized to ensure that a hierarchy of skills are included to meet the needs of individual students.

The terminal performance objective explicitly defines what it is the student will be able to do upon completion of the learning sequence. It is the broadest yet most comprehensive summary statement of the learning outcomes included in the packet. Through a process of analysis, intermediate performance objectives are then identified. These are the specific interim steps which will lead the students to the achievement of the terminal performance objectives.

Once all of the performance objectives have been specified, it is the responsibility of the packet developer to systematically organize alternative learning activities which serve as vehicles to assist students toward achievement of the

objectives. These activities must reflect the learning outcomes implicit in the stated objectives and include a wide array of media and varying organizational patterns to accomplish this end. This process involves the search for and the selection of commercially available print and non-print materials.

A unique feature of the training program is the option open for teachers to produce original materials that will be included in the SPOKE-PAKS. Self-instructional areas have been organized which enable teachers to learn various media production techniques. The areas are furnished with auto-instructional devices complemented by visual illustrations of the procedures.

Finally, evaluative criteria are developed in the form of pretests, self-assessment tests and post-tests to determine whether the objectives have, in fact, been achieved. Feedback information is provided through teacher and student evaluation forms included as part of each unit to assist in the validation of the packets.

Project SPOKE is a regional educational resource, media production and in-service training center located in Norton, Massachusetts.

DR. I. L. ROY STERN

Dr. Stern, during the past twenty years has served as a teacher, principal and district administrator in public and independent schools. Dr. Stern was graduated with a BA degree from the Washington Square College of New York University in 1948. He earned a MA degree from the New York University School of Education in Science Education, and a PhD in the field of administration and curriculum development. He is a member of Phi Delta Kappa and has been active in various professional organizations particularly with the Association for Supervision and Curricum Development on the national, stat e and county level. Dr. Stern is listed in Who's Who in Education.

Prior to joining Learning Research Association, Dr. Stern was director of Educational Consulting Services for Booz Allen and Hamilton. Formerly, he served as assistant superintendent for instruction in the Glen Cove, New York, Public Schools. In this capacity he was responsible for educational programs from preschool level to the twelfth grade, and was instrumental in developing and putting into practice; the non-graded concept, team teaching, individualized instruction in middle grade mathematics, development of behaviorial objectives, unique in-service training programs in reading, and working with disadvantaged students.

Dr. Stern served as a high school science teacher, and an elementary and high school principal in the Westbury, New York Public Schools. During this time he introduced one of the first volunteer prekindergarten programs, and organized and administered a cooperative summer high school involving five neighboring school districts.

He also served as principal of the King's Point Country Day School, Great Neck, New York, a private school which encompassed prekindergarten through eighth grade.

Dr. Stern is experienced in developing plans for integration of school systems, as well as special approaches for working with disadvantaged children. He has extensive experience in introducing promising innovative educational practices which relate to patterns of organization, staff utilization, teacher training and curriculum development. He was most recently involved in a study for the Wyoming State Department of Education which included an assessment of the public schools of the state. Evaluation and recommendations in the study dealt with organization, personnel, curriculum and financing. He has also consulted with a number of different school districts in the northeast.

He was project manager for the Guaranteed Student Achievement in Reading Project involving 2250 students efficient in reading in

eighteen schools and seven school districts in grades one through nine in the State of Virginia, including the City of Norfolk. An individualized approach using diagnosis, prescription and learning materials is employed. Teachers are trained and the centers are to be "turnkeyed" back to the local schools.

As Vice President and Director of School Services for LRA, he is responsible for major contract learning projects in Chicago, Jacksonville, and New York City. He is committed to individualization of instruction and has designed and operates Institutes for Individualization of Instruction where the experiences are individualized for each of the participants. Performance objectives are used as a basis for guiding the experiences.

MIKE VAN RYN
CHIEF, BUREAU OF INSERVICE
EDUCATION, NEW YORK STATE
EDUCATION DEPARTMENT,
ALBANY, NEW YORK

Mike Van Ryn has been a teacher, professor, lecturer and consultant at various levels of education throughout the State of New York.

In the past he has devoted much of his time working with the Office of Economic Opportunity and the many state agencies of New York in the preparation and special training of teacher programs designed to prepare teachers for urban disadvantaged schools.

He holds a B.S., M.S. and is expected to receive his Ed.D. at Columbia University this coming spring. Mr. Van Ryn attended the State University College at New Paltz where he majored in elementary education.

Mr. Van Ryn is presently attached to the Bureau of Inservice Education , New York State Education Department. Much of his research has been in the area of inservices training for teachers in handling the situations found in urban disadvantaged areas.

PUBLICATIONS OF MIKE VAN RYN

Contributor to Imperatives for Change
New York State Education Department, 1967
Contributor to Journey to Excellence (revised edition)
New York State Education Department, 1967
Contributor to Equal Education Opportunity Newsletter

Research in Progress

A Study of Teacher Education Programs designed to prepare teachers for Urban Disadvantaged School.

ABSTRACT: Planning and Managing Organizational Change

by Mike Van Ryn

"We must place the future, like the unborn child in the womb of a woman, within a community of men, women and children among us, already here, already to be nourished and succored and protected, already in need of things for which, if they are not prepared before it is born, it will be too late. So, as the young say, The Future Is Now."

Margaret Mead

Participants interested in becoming more familiar with the major steps involved in planning and managing organizational change will find this session to be particularly useful. The basic steps to be discussed during the session will include the following

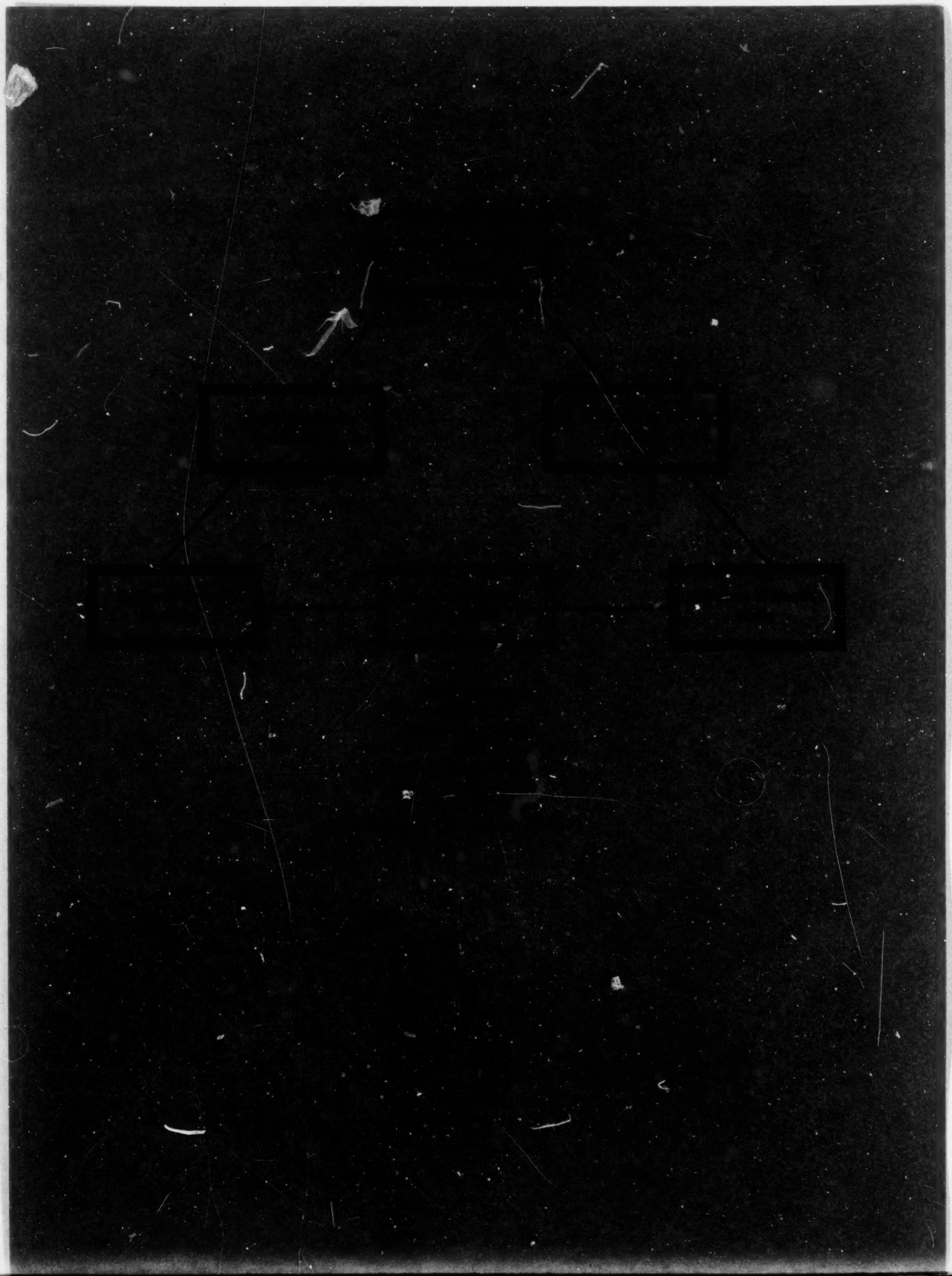
Developing the planning base;

Translating planning into an operational plan;

and,

Implementing the operational plan.

Through the utilization of various illustrations, participants will be afforded the opportunity to acquire an overview of the procedures inherent in the planning and managing steps. Issues and problems related to each of the steps will be discussed and planning strategies and management processes will be explicated.



CURRENT EDUCATION

Books

Beggs, D.W. and E.G. Buffie, eds. Nongraded Schools in Action. Bloomington, Indiana: University Press, 1967.

Beggs, D.W. and E.G. Buffie, eds. Independent Study. Bloomington, Indiana: University Press, 1968.

Borg, Walter. Ability Grouping in the Public Schools. Madison: Dembar Educational Research Services, Inc., 1966.

Brown, B.F. Education by Appointment. New York: Parker, 1968.

Clasen, E.R., ed. On To The Classroom. Wisconsin: Dembar Educational Research Services, 1969.

Esbensen, T. Working with Individualized Instruction. California: Fearon Publishers, 1968.

Goulet, R.R., ed. Educational Change: The Reality and The Promise. New York: Citation Press, 1968.

Summaries of I/D/E/A Conferences on Innovations. Of particular interest: Schoolhouse in Transition and Humanistic Technology.

Hart, L. The Classroom Disaster. New York: Teachers' College Press, 1969.

Klausmeier, H. and C. O'Hearn. Research and Development Toward the Improvement of Education. Madison: Dembar Educational Research Services, Ind., 1968.

Kohl, Herbert. 36 Children. New York: The New American Library, 1967.

Account of a teacher's year in a ghetto classroom.

Kornbluth, J., ed. Notes From The New Underground. New York: Ace Publishing Corporation, 1968.

Collection of writings from the underground press.

Kozol, J. Dea[illegible]t An Early Age. Boston: Houghton Mifflin Company, 1967.

"The destruction of the hearts and minds of Negro children in the Boston public schools" as told by a fourth0grade teacher.

Manlove, D. and D. Beggs. Flexible Scheduling. Bloomington: Indiana University Press, 1968.

Michaelis, John, Ruth Grossman and Lloyd Scott. New Designs for the Elementary School Curriculum. New York: McGraw-Hill Book Company, 1967.

Develops model of components of curriculum and discusses each subject area within defined framework.

Morphet, E. and David Jesser. Cooperative Planning For Education in 1980. New York: Citation Press, 1968.

Schrag, P. Village School Downtown. Boston: Beacon Press, 1967.

Specifically concerned with the urban schools in Boston.

Schwab, J.J. College Curriculum and Student Protest. Chicago: University of Chicago Pres,, 1969.

Reports research which examines style, content and expression of student protest, surveys resources available for treating "curricular ills" and provides prescriptions utilizing these resources.

Skinner, B.F. The Technology of Teaching. New York: Meredith Corporation, 1968.

Toffler, Alvin, ed. The Schoolhouse in the City. New York: Frederich A. Praeger, Inc., 1968.

Tussman, Joseph. Experiment at Berkley. New York: Oxford University Press, 1968.

Experiment concerns curriculum developed to meet demands of modern education and yet to retain responsibility for planning for the college faculty.

Unruh, Glenys and Robert Leeper. Influences in Curriculum Change. Washington: Association for Supervision and Curriculum Development, 1968.

Considers influences in curriculum design as well as in subject fields and curriculum change.

Articles

Black, J. "One step off the sidewalk." Saturday Review, (November 15, 1969), 88-9.

Clinchy, E. "Good school in a ghetto." Saturday Review, (November 16, 1968), 106-7.

Counts, G. :Where are we?" Educational Forum, 30(May, 1966), 397-406.

Featherstone, J. "High School; film about Northeast High School." New Republic, 160(June 21, 1969), 28-30.

Gibbons, M. "Changing secondary education now." NASSP Bulletin, 54(January, 1970), 30-48.

Recommends: change in relationship between student and teachers concerning act of learning by: communicating; consulting; cooperating; presenting range of choices; individualizing and communizing; introducing drama, service; and solitude; and experimenting.

Gorton, R. "New designs for high school education." Wisconsin Journal of Education, 99(March, 1967), 13-14.

Lewis, A. "Innovation and the open school." Educational Leadership, 24(May, 1967), 673-5.

"The everywhere school: One ghetto's bid for a future." School Management, 13(December, 1969), 39-45.

Presentation of Hartford's practical plan for a new kind of community - built around a new kind of school.

"What's wrong with the high schools?" Newsweek, (February 16, 1970), 65-9.

RADICAL EDUCATION

Books

Borton, T. Reach, Touch and Teach. New York: McGraw-Hill, 1970.

Dennison, George. The Lives of Children. New York: Random House, 1969.

"A practical description of freedom in its relation to growth and learning. The story of the First Street School."

Glasser, W. Schools Without Failure. New York: Harper & Row, 1969.

Proposes innovations including the use of the class as a counseling group, as well as new approaches to grouping, grading and home work.

Gross, Ronald and Beatrice, eds. Radical School Reform. New York: Simon and Schuster, 1969.

Contains excerpts from a number of contemporary works on education including writings by Kozol, Holt, Goodman, McLuhan, Leonard and Neill.

Hamachek, D.E., ed. Human Dynamics in Psychology and Education. Boston: Allyn and Bacon, Inc., 1968.

Aims to present insights about American education as a social system. Contributors include Robert Merton, David Riesman and Marshall McLuhan. Areas presented are: actors and roles, audiences and stages; bureaucratic structure; social stratification; social mobility and "success"; the quest for community; creativity as a social phenomenon; and some "revolutions of our time - drastic social changes".

Heath, Douglas H. Growing Up in College: Liberal Education and Maturity. San Francisco: Jossey-Bass Inc., 1968.

Holt, John.. How Children Learn. New York: Pitman Publishing Corporation, 1967.

Neill, A.S. Summerhill. New York: Hart Publishing Company, 1960.

Story of a free-school, a "radical approach to child rearing".

Articles

Barton, Anthony. "The Hard/Soft School." Media and Methods, (May, 1969), 51-55.

Bremer, John. "A Curriculum, A Vigor, A Local Abstraction." The Education Digest, 35(September, 1969), 13-16.

Rationale for a new curriculum incorporating community participation and participation in the community.

"Channeling activism into accomplishment." Nation's Schools, 84(September, 1969), 39-50.

A review of eight areas where student involvement is working.

Cox, D. "Learning on the road; Parkway project." Saturday Review, 52(May 17, 1969), 71.

Cox, D. and L. Lazorko. "School without walls: city for a classroom." Nation's Schools, 84(September, 1969), 51-8.

Description of Philadelphia's Parkway Program.

Divoky, D. "Project ASPIRE: help for hopeless kids." Scholastic Teacher Secondary Teacher's Supplement, (February 2, 1970), 20-2.

Divoky, D. "Revolt in the high schools: The way it's going to be." Saturday Review, (February 15, 1969), 83-90.

Divoky, D. "Young ideas in an old state." Saturday Review, (April 18, 1970), 62-5.

"Experiment: Philadelphia's school without walls: Parkway Program." Life, 66(May 16, 1969), 40-2.

Farber, R.H. "Free university." School and Society, 97(October, 1969), 356-8.

History and present status of the Free University as well as its effect on regular curriculum and comments concerning effect of incorporating it in totality into the regular program.

"Free form learners." Nation's Schools, 84(September, 1969), 48-50.

Goodman, Paul. "Freedom and Learning: The need for choice." Saturday Review, (May 19, 1968).

Griffen, W.L. "Free and unfree schools." Changing Education, 4(Fall, 1969), 17-9.

Harrison, G.H. "City is our classroom; Philadelphia's Parkway Program." Scholastic Teacher Secondary Teacher's Supplement, (December 1, 1969), 12-3.

Levine, D. "City as school." NASSP Bulletin, 53(December, 1969), 1-34.

Emphasizes importance in thinking about city's role in education and school's role in producing city's citizens.

Ohles, J.F. "Realities and student power." Record, 70(October, 1968), 53-6.

"School is not a place but an activity." Media and Methods, 6(January, 1970), 30-4.

An interview with John Bremer, principal of the Philadelphia Parkway School.

"School where little kids teach the teachers; Far West laboratory for educational research and development, Berkeley, California." Parents' Magazine, 44(September, 1969), 70-2.

Schrag, Peter. "Learning in a storefront." Saturday Review, (June 15, 1968), 71.

Schwebel, R. "Wakening our sleepy universities: student involvement in curriculum change; free universities and experimental colleges." Record, 70(October, 1968), 31-43.

"Street academies: New York's New Deal for ghetto dropouts." Nation's Schools, 83(May, 1969), 66-70.

"Summerhill in Ithaca; East Hill Elementary School, New York." Newsweek, 75(February 23, 1970), 65.

"Texarkana and Dorsett Sign Contract." Report on Education Research, 2(January 21, 1970), 4.

Dorsett Educational Systems, Inc., agrees to organize and operate an instructional component to teach skills to school dropouts on an incentive payment basis.

"The Academic Revolution: Patterns of Reform; The Case for Radical Change." Saturday Review, (October 18, 1969), 80-3.

"The anywhere school: One city's break with the past." School Management, 13(December, 1969), 46-55.

Describes program of Philadelphia's school without walls, the Parkway School.

SCHOOLS OF THE FUTURE

Books

Berman, L.M. New Priorities in the Curriculum. Columbus, Ohio: Charles E. Merrill Publishing Co., 1968.

New priorities are eight human process skills: perceiving, communicating, loving, decision making, knowing, organizing, creating and valuing.

Eurich, A., ed. High School 1980. New York: Pitman Publishing Corporation, 1970.

Leading educators evaluate and predict changes which will mold future of American secondary education.

Eurich, A. Reforming American Education. New York: Harper and Row, 1969.

Frost, J.L. and G.T. Rowland. Curricula For The Seventies. Boston: Houghton Mifflin, 1969.

Hirsch, W.Z. and colleagues. Inventing Education for The Future. San Francisco: Chandler Publishing Company, 1967.

Leonard, G.B. Education and Ecstasy. New York: Delacorte Press, 1968.

Raises the question "what is education", presents own definition, and climaxes in "visit" to school of 2001 as he envisions it.

Peterson, A.D.C. The Future of Education. London: The Cresset Press, 1968.

Author discusses future of education for the kind of society which is now present. Considers concept of education, content, method and pattern of administration as well as future role of the teacher.

The High School of the Future: A Memorial to Kimball Wiles. Columbus, Ohio: Charles E. Merrill Publishing Co., 1969.

Articles

Bushnell, D.S. "Educational system for the '70's." Phi Delta Kappan, 51(December, 1969), 199-210.

Clark, Kenneth. "Alternative Public School Systems." Harvard Education Review, 38(Winter, 1968), 100-113.

Suggests as possible, practical competitors to present form: regional state schools, federal regional schools, college- and university-related open schools, industrial demonstration schools, labor union sponsored schools and army schools.

"Education in the 1980's." School and Society, 95(April 1, 1967), 206.

Eibling, H.H. "Education for a new century: curriculum development." Education, 86(January, 1966), 261.

Frost, J.L. and G.T. Rowland. "Seventies: a time for giant steps." Childhood Education, 46(September, 1969), 4-13.

Author's requirements for '70's: no letter grades, no grade levels, emphasis on individualized instruction, school a part of immediate community, early childhood education, revised roles for administrators and teachers.

Gall, M. "Space age curriculum." Social Education, 34(January, 1970), 60-2.

Goodlad, J. "Toward 2000 A.D. in education." NCEA Bulletin, 65(August, 1968), 16-22.

Questions sequence in present curriculum, objectives of education, retention of "walled-off classrooms in walled-off schools", etc. Predicts continued effort to humanize education, elimination of prescribed age for entering school, elimination of "9-3, September-June" school, class periods, bells, carnegie units, etc.

Gottesman, A.M. "Education in the seventies." Peabody Journal of Education, 45(September, 1967), 76-81.

General predictions include: organizational (schedule) changes, new instructional materials centers, teacher as consultant,computers in education, new role of teacher as diagnostician.

Havinghurst, R.J. "High schools for the future." NASSP Bulletin, 52(May, 1968), 117-25.

Predicts emphasis on expressive education which will recognize student with talents in these areas as successful as student with talents in science and mathematics.

Heath, D. "Education for 1984." The Independent School Bulletin, (October, 1969), 8-12.

Hogan, A. "Education in 20 years." School and Community, 56(October, 1969), 10-11.

Ruark, H.C. "Now or never for 1990." Educational Screen and Audio-visual Guide, 45(September, 1966), 19.

Sand, O. "Schools for the seventies." Music Educators Journal, 52(June, 1966), 40-2.

"Schools are here to stay." The Instructor, 76(January, 1967), 12.

Editorial responds to Robert Hutchins' statement that "modern technology will...eliminate the school", by agreeing on increased use of hardware but also emphasizing importance of peraonal contacts, group dynamics, interaction in process of teaching.

Yamasaki, K. and D. Cox. "School for the '70's: The module is one." Nation's Schools, 85(March, 1970), 57-76.

MISCELLANEOUS

Books

Abt, Clark. Serious Games. New York: The Viking Press, 1970.

"The art and science of games that simulate life - in industry, government, education, and personal relations, interpreted with examples by a leading exponent and innovator."

Acland, R. Curriculum or Life? Gollancz, Canada: Humanities Press, 1966.

Andereon, James G. Bureaucracy in Education. Baltimore: The Johns Hopkins Press, 1968.

Battle, J.A. and R.L. Shannon. The New Idea in Education. New York: Harper and Row, 1968.

Ekstein, R. and R. Motto, eds. From Learning For Love To Love of Learning. New York: Brunner - Mazel, Inc., 1969.

Gustaitis, R. Turning On. New York: Macmillan, 1969.

Hedley, W.E. Freedom, Inquiry and Language. Scranton, Pa.: International Textbook Company, 1968.

A reminder that many of the "modern" educational philosophies are not new - author analyzes Dewey's Theory of Inquiry, Sartre's Concept of Freedom and Wittgenstein's Language Games. Implications for curriculum theory.

Hodgkinson, H. Education, Interaction and Social Change. Englewood Cliffs, N.J.: Prentice-Hall, 1967.

Holt, John. How Children Fail. New York: Pitman Publishing Corporation, 1968.

Holt, John. The Underachieving School. New York: Pitman Publishing Corporation, 1969.

Martin, W. Realism in Education. New York: Harper and Row, 1969.

McDill, Edward L., Mary S. McDill and J.T. Sprehe. Strategies for Success in Compensatory Education: An Appraisal of Evaluation Research. Baltimore: The Johns Hopkins Press, 1969.

Postman, Neil and Charles Weingartner. Teaching as a Subversive Activity. New York: Delacorte Press, 1969.

Swain, Donald C. Wilderness Defender. Chicago: University of Chicago Press, 1970.

The Schools and The Challenge of Innovation. New York: McGraw-Hill, 1969.

The Supervisor: Agent for Change in Teaching. Washington: Association for Supervision and Curriculum Development, 1965.

Walton, John. Administration and Policymaking in Education. Baltimore: The Johns Hopkins Press, 1969.

Articles

Amos, N. "Human process: direction for inno ation?" Contemporary Education, 40(November, 1968), 97-8.

Angle, P.H. "Designing a dynamic curriculum." Audiovisual Instruction, 15(January, 1970), 36-8.

Boocock, S.S. "Toward a sociology of learning; outside-school influences upon student performance." Sociology of Education, 39(Winter, 1966), 32-41.

Brickman, W.W. "Educational innovation and the individual." School and Society, 95(January 21, 1967), 38.

Cottle, T.J. "Bristol Township schools: strategy for change." Saturday Review, 52(September 20, 1969), 70-1.

Cyrs, T.E. and R. Lowenthal. "Model for curriculum design using a systems approach." Audiovisual Instruction , 15(January, 1970),16.

Glatthorn, A.A. "Little bit of rebellion is good for the soul and the school." Seventeen, 28(August, 1969), 324-5.

Howard, E.R. "Developing student responsibility for learning." NASSP Bulletin, 50(April, 1966), 235-46.

Recommends: options (student, content, time, facility and personnel), inquiry, thematic and concept-centered approach and importance of self-concept.

Kvaraceus, W.C. "Working with youth: some operational principles and youth values." NASSP Bulletin, 53(December, 1969), 62-71.

Presents guidelines as well as research findings of a Youth and Adult Values Study done by the New England School Development Council.

Lauter, P. "Teacher power: an agent of change?" Changing Education, 4(Fall, 1969), 22-4.

New Schools Exchange Newsletter. Santa Barbara, Calif.: (2840 Hidden Valley Lane - 93103), weekly newsletter, Directory of schools and position papers.

Taylor, C.W., E. Nielsen and B. Clark. "Talent awareness training; program that considers and changes teacher performance in terms of behavioral goals." The Instructor, 78(May, 1969), 61-8.

Tuckman, B.W. "Student-centered curriculum." Educational Technology, 9(October, 1969), 26-9.

Author presents postulates upon which a student-centered curriculum can be based. He also lists suggested resulting propositions. Proposed curriculum would focus upon, primarily, specific, occupational, behavioral objectives and would utilize individualized instruction.

Watson, E.R. "Group communications and developmental processes." High School Journal, 52(May, 1969), 431-40.

Weisgerber, R.A. "Newest school system." Clearing House, 41(October, 1966), 126-7.

Suggests "systems approach" to instruction.

SENSITIVITY

Books

Greenberg, Herbert. Teaching With Feeling. New York: Pegasus, 1969.

Hamilton, Norman and J. Galen Saylor. Humanizing the Secondary School. Washington: Association for Supervision and Curriculum Development, 1969.

Hentoff, Nat. Our Children Are Dying. New York: The Viking Press, 1966.

Jones, Richard M. Fantasy and Feeling in Education. New York: New York University Press, 1968.

Author is concerned with emotional and imaginal moves as well as cognitive moves in education.

Leeper, Robert R., ed. Humanizing Education: The Person in the Process. Washington: Association for Supervision and Curriculum Development, 1967.

Scobey, Mary-Margaret and Grace Graham, eds. To Nurture Humaneness. Washington: Association for Supervision and Curriculum Development, 1970.

Perceptions, influences and education imperatives concerning humaneness.

Siegel, Laurence, Ed. Instruction: Some Contemporary Viewpoints. San Francisco: Chandler Publishing Compnay, 1967.

Includes chapter on Cognitive Models of Learning and Instruction and A Behavioristic Analysis of Instruction as well as A Cognitive-Structure Theory of School Learning.

Articles

Birnbaum, M. "Sense about sensitivity training." Saturday Review, 52(November 15, 1969), 82-3.

Bland, L. and others. "Intense encounters in human relations training." Personnel and Guidance Journal, 48(September, 1969), 56-7.

Kirschenbaum, Howard. "Sensitivity Modules." Media and Methods, 6(February, 1970), 36.

Menzel, E.W. "Science teaching and sensitivity training?" Science Teacher, 36(November, 1969), 17-20.

Sigut, W. and R. Lohr. "Teacher sensitivity groups." Pennsylvania School Journal, 118(September, 1969), 30.

Strunk, B.B. "Programs in progress: sensitivity training." School Management, 13(September, 1969), 58.

Articles

Axtelle, G.E. "Humanizing of knowledge and the education of values." Education Theory, 16(April, 1966), 101-9.

Suggests education of values (i.e. understanding consequences, significance and relations to other values), values not to be indoctrinated and that knowledge, intelligence and values are involved organically in behavior.

Botkin, R. "Can we teach values?" Educational Record, 49(Spring, 1968),189.

Brown, I.C. "What is valued in different cultures?" Educational Leadership, 27(November, 1969), 151.

Buethe, C. "Curriculum of value." Educational Leadership, 26(October, 1968), 31-3.

Carroll, F.G. "Adjusting our teaching: adapting to other values." Elementary English, 46(February, 1969), 172-3.

Stresses importance of teacher attitude to fostering learning; and importance of teacher knowledge concerning values of students in determining teacher attitude.

Chaffee, S.H. and J. W. Lindner. "Three processes of values change without behavioral change." Journal of Communication, 19(March, 1969), 30-40.

Cole, C.W. and C.D. Miller. "Relevance of expressed values to academic performance." Journal of Counseling and Psychology, 14(May, 1967), 272.

Cormier, R. "Assessing human values relates to environment of the individual." Delta Kappa Gamma Bulletin. 36(Fall, 1969), 17-23.

Dean, E.M. "Adapting to other values: the role of the adjustment teacher." Elementary English, 46(February, 1969), 169-71.

Released from classroom responsibilities, the adjustment teacher collects and disseminates to the classroom teachers pertinent information about community, student body, school philosophy and individual child as well as suggestions for curricula for particular classes.

Dressel, P.L. "Value oriented instructional techniques." Improving College and University Teaching, 14(Summer, 1966), 138-44.

Emans, R. "Teacher attitudes as a function of values." Journal of Educational Research, 62(July, 1969), 459-63.

Frame, T. "In choosing values today's children need practice." Delta Kappa Gamma Bulletin, 36(Fall, 1969), 33-36.

Halleck, S.L. "Generation gap: a problem of values." Education Digest, 34(January, 1969), 32-5.

Shift in value systems of today's youth includes: enjoyment of present, freedom from imposed structure, and self-revelation. Author suggests guidelines for value system relevant to all men.

Hassenger, R. "Rationale for changing student values." Educational Record, 48(Winter, 1967), 61-7.

Holt, J. "Values we teach in school." Grade Teacher, 87(September, 1969), 72.

Holt calls for teachers to be "authentic". He cites examples of instances illustrating that many are not and presents suggestions as to how they can be authentic.

Jaros, D. and B.C. Canon. "Transmitting basic political values: the role of the educational system." School Review, 77(June, 1969), 94-107.

Junell, J.S. "Do teachers have the right to indoctrinate?" Phi Delta Kappan, 51(December, 1969), 182-9.

Kirshenbaum, H. and S.B. Simon. "Teaching English with a focus on values." English Journal, 58(October, 1969), 1071-6.

Lafferty, J.C. "Values that defeat learning." NASSP Bulletin, 52(May, 1968), 201-12.

Fear of failure, belief concerning relationship of sense of worth to evaluation, concept of rewards.

Lippincott, W.T. "Learning and the value sphere." Journal of Chemical Education, 46(June, 1969), 333.

Overholt, T.W. and A.P. Schenk. "Violence and human values: the implications of an interdisciplinary seminar for curriculum revision; Yankton College, S.D." Journal of General Education, 21(July, 1969),107.

Paschal, B.J. "How children learn values." Education Digest, 33 (May, 1968), 49-51.

"Teacher's function is not to indoctrinate but to create an atmosphere conducive to learning..." Also stresses need to build self-concept, to provide atmosphere of permissiveness and to clarify choices for the child.

Paschal, B.J. "Values as basic in education." School and Society, 96(February 3, 1968), 77-8.

Paske, G.H. "Violence, value and education." The Record, 71(September, 1969), 51=63.

Sartain, H.W. and R.B. Weigand. "Classroom accommodations for the different value systems." Conference on Reading, University of Pittsburgh Report, 23(1967), 57-72; 191-7.

Schonborg, V. "Examining our values." Childhood Education , 45(September, 1968), 15-16.

Simon, S.B. and M. Harmin. "Subject matter with a focus on values." Educational Leadership, 26(October, 1968), 34-5.

Smith, H.R. "Ubiquitous class-value conflict in education." School and Society, 97(February, 1969), 92-4.

Need for teacher knowledge concerning not only peer group of students but also of social network, attitudes and values of group.

Sulkin, S. "Folklore of educational values." NASSP Bulletin, 53(May, 1969), 107-17.

"Myths" presented include: overvalued academic achievement, excitement of learning, dropout myth, learning myth and adult values.

VALUES

Books

Axel
rod, J., M. Freedman and others. Search for Relevance. San Francisco: Jossey-Bass Inc., 1969.

Identifies issues in higher education of today and presents straightforward answers. Concerned with "the destination", "relevance or violence" and "folklore to knowledge".

Berm
an, L.M., ed. The Humanities and The Curriculum. Washington: Association for Supervision and Curriculum Development, 1967.

Blis
hen, Edward, ed. The School That I'd Like. Baltimore: Penguin Books, Inc., 1969.

Collection of writings by secondary-school children.

Chic
kering, Arthur. Education and Identity. San Francisco: Jossey-Bass Inc., 1969.

Divo
ky, Diane. How Old Will You Be In 1984? New York: Avon Books, 1969.

"Expressions of student outrage from The High School Free Press."

Fiel
ds, M. R., ed. Encounters with Reality. New York: Center for Applied Research in Education Inc., 1967.

Collection of papers dealing with "contemporary encounter with reality in education". Topics include: new challenges to the urban university, educational technology and value systems, implications of anti-poverty, etc.

Lewis, C. Values and Imperatives. Stanford: Stanford University Press, 1969.

Nash, P. Authority and Freedom In Education. New York: John Wiley & Sons, Inc., 1966.

A dialectical approach to problems of education concerning work, institutions, discipline, the group, excellence, determinism, tradition and commitment.

Ostr
ander, R. and R. Dethy. A Values Approach to Educational Administration. New York: American Book Company, 1968.

Rath
s, L., M. Harmin and S. Simon. Values and Teaching. Columbus, Ohio: Charles Merrill Publishing Co., 1966.

Describes a theory of values and presents specific strategies to implement the theory.

Rich
, J.M. Education and Human Values. Reading, Mass.: Addison-Wesley Publishing Company, 1968.

Analyzes value issues found in education today and proposes alternate solutions where possible. Consideration is given to cultural, organizational, moral and aesthetic values.

Roge
rs, C.R. Freedom to Learn. Columbus, Ohio: Charles E. Merrill Publishing Company, 1969.

Discusses creating climate of freedom, philosophical and value ramifications and presents a "Model for Revolution".

A BIBLIOGRAPHY OF INSTRUCTIONAL MATERIAL

BOOKS, PAMPHLETS, REPORTS, ETC.

Armstrong, Robert J. (Ed.) DEVELOPING & WRITING BEHAVIORAL OBJECTIVES. Tucson, Arizona: Educational Innovators Press, Inc., 1968.

Association of Supervision & Curriculum Development. IMPROVING EDUCATIONAL ASSESSMENT AND AN INVENTORY OF MEASURES OF AFFECTIVE BEHAVIOR. Washington: National Education Association, 1969.

Baker, Robert L., Vernon S. Gerlach, and Howard J. Sullivan. CONSTRUCTING BEHAVIORAL OBJECTIVES. Inglewood, California: Southwest Regional Laboratory for Educational Research and Development, 1968.

Baker, Robert L., Vernon S. Gerlach, Richard E. Schutz, and Howard J. Sullivan. DEVELOPING INSTRUCTIONAL SPECIFICATIONS. Inglewood, California: Southwest Regional Laboratory for Educational Research and Development, 1968.

Benathy, Bela H. INSTRUCTIONAL SYSTEMS. Palo Alto, California: Fearon Publishers, 1969.

Bernabei, Raymond. BEHAVIORAL OBJECTIVES: AN ANNOTATED RESOURCE FILE. Harrisburg, Pennsylvania: Department of Public Instruction, 1969. (45 pages)

Bernabei, Raymond, et al. BEHAVIORAL OBJECTIVES IN CURRICULA AND EVALUATION. Dubeque, Iowa: Kendall/Hunt Publishing Co., 1970.

Cubberly/Lockheed Science Project Final Report, Volume I - Narrative Report. A Development Project to Attain Stated Behavioral Objectives in Science: A System Approach. Cubberly (Elwood P.) Senior High School, Palo Alto, California, ERIC #ED 025 428.

Eiss, Albert F. and Mary Blatt Harbeck. BEHAVIORAL OBJECTIVES IN THE AFFECTIVE DOMAIN. Washington: National Science Supervisors Association, 1969.

Esbensen, Thorwald. WORKING WITH INDIVIDUALIZED INSTRUCTION: THE DULUTH EXPERIENCE. Palo Alto, California: Fearon Publishers, 1968.

French, Will, et al. BEHAVIORAL GOALS OF GENERAL EDUCATION IN HIGH SCHOOL. New York: Russel Sage Foundation, 1957.

Gronlund, Norman F. STATING BEHAVIORAL OBJECTIVES FOR CLASSROOM INSTRUCTION. London: The MacMillan Company, 1970.

Kibler, Robert J. et. al., BEHAVIORAL OBJECTIVES AND INSTRUCTION. Boston: Allyn and Bacon, Inc., 1970.

Krathwohl, David R. et al. TAXONOMY OF EDUCATION OBJECTIVES, HANDBOOK II: AFFECTIVE DOMAIN. New York: David McKay Company, Inc., 1956.

Lindvall, C. M. (Ed.) DEFINING EDUCATION OBJECTIVES. Pittsburgh: University of Pittsburgh Press, 1964.

Mager, Robert F. PREPARING INSTRUCTIONAL OBJECTIVES. Palo Alto, California: Fearon Publishers, 1962.

Mager, Robert F. PREPARING OBJECTIVES FOR PROGRAMMED INSTRUCTION. San Francisco: Fearon Publishers, 1961.

Mager, Robert F. DEVELOPING ATTITUDE TOWARD LEARNING. Palo Alto, California: Fearon Publishers, 1968.

Plowman, Paul D. AN INTERPRETATION OF THE TAXONOMY OF EDUCATIONAL OBJECTIVES. (unpublished pamphlet) 1968.

Popham, W. James, et al., INSTRUCTIONAL OBJECTIVES. Chicago: Rand McNally & Co., 1969. (AERA Monograph).

Popham, W. James. EDUCATIONAL CRITERION MEASURES. Inglewood, California: Southwest Regional Laboratory for Educational Research and Development, 1968.

Sanders, Morris M. CLASSROOM QUESTIONS - WHAT KINDS. New York: Harper and Row, 1966. (Deals with Bloom's Taxonomy.)

Smith, Robert G. THE DEVELOPMENT OF TRAINING OBJECTIVES. Washington, D.C.: George Washington University, Human Resources Research Office, 1964.

STATING EDUCATIONAL OUTCOMES. Inglewood, California: Southwest Regional Laboratory for Educational Research and Development, 1968.

Tyler, Ralph, Robert Gagne and Michael Scriven. PERSPECTIVES OF CURRICULUM EVALUATION. Chicago: Rand McNally & Co., 1967. (AERA Monography).

ARTICLES

Ammons, M. "Definition, Function and Use of Educational Objectives", ELEMENTARY SCHOOL JOURNAL, Vol. 62, pp. 432-36.

Bolvin, John O. "Implications of the Individualization of Instruction for Curriculum and Instructional Design", AUDIOVISUAL INSTRUCTION, Vol. XIII, pp. 238-242, March, 1968.

Burns, Richard W. "Objectives and Classroom Instruction", EDUCATIONAL TECHNOLOGY, Vol. VII, No. 20, October 30, 1967.

Burns, Richard W. "The Theory of Expressing Objectives", EDUCATIONAL TECHNOLOGY, Vol. VII, No. 20, October 30, 1967.

Burns, Richard W. "Objectives in Action", EDUCATIONAL TECHNOLOGY, Vol. VIII, No. 3, February 15, 1968.

Burns, Richard W. "Objectives Involving Attitudes, Interest and Appreciations", EDUCATIONAL TECHNOLOGY, Vol. VIII, No. 8, April 30, 1968.

Burns, Richard W. "Measuring Objectives and Grading", EDUCATIONAL TECHNOLOGY, Vol. VIII, No. 18, September 30, 1968.

Burns, Richard W. "Objectives and Content Validity of Tests", EDUCATIONAL TECHNOLOGY, Vol. VIII, No. 23, December 15, 1968.

Canfield, Albert A. "A Rationale for Performance Objectives", AUDIOVISUAL INSTRUCTION, Vol. 13, pp. 127-129, February, 1968.

Cohen, Arthur. "Defining Instructional Objectives", SYSTEMS APPROACHES TO CURRICULUM AND INSTRUCTION IN THE OPEN-DOOR COLLEGE, Johnson, Lamar B., (Ed.), University of California at Los Angeles, 1967.

Craik, Mary B. "Writing Objectives for Programmed Instruction--Or Any Instruction", EDUCATIONAL TECHNOLOGY, Vol. VI, No. 4.

Csanyi, Attila P. "Determining Objectives: A Behavioral Systems Approach", NSPI JOURNAL, Vol. VII, pp.16-18, February, 1968.

Darling, D. W. "Why a Taxonomy of Affective Learning?", EDUCATIONAL LEADERSHIP, Vol. 22, pp. 473-475, April, 1965.

Deterline, William A. "The Secrets We Keep From Students", EDUCATIONAL TECHNOLOGY, Vol. VIII, pp. 7-10, February 15, 1968.

Dressel, P. L. "Are Your Objectives Showing?", NATIONAL EDUCATION ASSOCIATION JOURNAL, Vol. 44, p. 267, May, 1955.

Drumheller, Sidney J. "A Model for Applying the Bloom Taxonomy of Education Objectives in Curriculum Design", NSPI JOURNAL, Vol. VII, pp. 10-13, May, 1967.

Ebel, R. L. "Relation of Testing Programs to Educational Goals", NATIONAL SOCIETY FOR THE STUDY OF EDUCATION, YEARBOOK -- 1962, Part 2, pp. 28-44, 1963.

Edling, Jack V. "Educational Objectives and Educational Media", REVIEW OF EDUCATIONAL RESEARCH, Vol. 38, pp. 174-194, April, 1968.

Engman, B. D. "Behavioral Objectives: Key to Planning", THE SCIENCE TEACHER, Vol. 34, pp. 86-87, October, 1968.

Esbensen, T. "Writing Instructional Objectives: Satire", PHI DELTA KAPPAN, Vol. 48, pp. 246-47, January, 1967.

Gall, Morris. "They Learn More Than You Teach Them" (Excerpt from the Series-Behavioral Outcomes.) GRADE TEACHER, Vol. 84, April, 1967.

Garvey, J. F. "What and Why Behavioral Objectives", THE INSTRUCTOR, Vol. 77, p. 127, April, 1968.

Gerhard, M. "Behavioral Outcomes: What the Child is Able to Do and Does as a Result of the Teaching -- Learning Experience", GRADE TEACHER, Vol. 84, pp. 92-95, April, 1967.

Grieder, C. "Is It Possible to Work Educational Goals?", NATIONAL SCHOOLS, Vol. 68, p. 10, October, 1961.

Haverman, Mr. "Behavioral Objectives: Bandwagon or Breakthrough?", THE JOURNAL OF TEACHER EDUCATION, Vol. 19, pp. 91-94, Spring, 1968.

Havighurst, R. J. "Research on the Development Task Concept", SCHOOL REVIEW, Vol. 64, pp. 215-223, May, 1956.

Hoover, W. F. "Specification of Objectives", AUDIOVISUAL INSTRUCTION, Vol. 12, p. 597, June, 1967.

James, B. J. "Can Needs Define Educational Goals?", ADULT EDUCATION, Vol. 7, No. 1, pp. 19-26.

Jarolimek, J. "Taxonomy: Guide to Differentiated Instruction", SOCIAL EDUCATION, Vol. 26, pp. 445-447, December, 1962.

Jones, Richard V., Jr. "Learning Activity Packages: An Approach to Individualized Instruction", JOURNAL OF SECONDARY EDUCATION, Vol. 22, pp. 101-103, April, 1968.

Kapfer, Philip G. "Behavioral Objectives in the Cognitive and Affective Domains", EDUCATIONAL TECHNOLOGY, Vol. VIII, No. 11, June 15, 1968.

Kapfer, Mariam B. "Behavioral Objectives and the Gifted", EDUCATIONAL TECHNOLOGY, Vol. VIII No. 11, June 15, 1968.

Kapfer, Philip G. "Behavioral Objectives: Cognitive and Affective Domains", EDUCATIONAL SCREEN AND AUDIOVISUAL GUIDE, Vol. 47, pp. 10-11, 38, July, 1968.

Kapfer, Philip and Swenson, Gardner. "Individualizing Instruction for Self-Paced Learning:, THE CLEARING HOUSE, Vol. 42, pp. 405-410, March, 1968.

Krathwohl, David R. "Stating Objectives Appropriately for Program, for Curriculum, and for Instructional Materials Development", THE JOURNAL OF TEACHER EDUCATION, Vol. XVI, pp. 83-92, March, 1965.

Kurtz, Edwin, Jr. "Help Stamp Out Non-Behavioral Objectives", THE SCIENCE TEACHER, Vol. 32, pp. 31-32, January, 1965.

Leavitt, H. B. "Dichotomy Between Ends and Means in American Education", JOURNAL OF EDUCATION, Vol. 141, pp. 14-16, October, 1958.

Lewey, A. "Empirical Validity of Major Properties of a Taxonomy of Affective Educational Objectives", THE JOURNAL OF EXPERIMENTAL EDUCATION, Vol. 36, pp. 70-77, Spring, 1968.

Mager, Robert F. "Deriving Objectives for the High School Curriculum", NSPI JOURNAL, Vol. VII, No. 3, March, 1968.

Mayer, F. "Aims of Education", EDUCATION, Vol. 76, pp. 630-8, June, 1956.

McDermott, John J. "Carlisle District Writes Behavioral Objectives", THE SCIENCE TEACHER, Vol. 34, pp. 32-33, May, 1968.

McKeegan, Hugh F. "What Individualizing Instruction Means to the Curriculum Director", AUDIOVISUAL INSTRUCTION, Vol. XIII, pp. 232-237, March, 1968.

McNeil, Jan and James E. Smith. "The Multi's at Nova", EDUCATIONAL SCREEN AND AUDIOVISUAL GUIDE, Vol. 47, pp. 16-19, January, 1968.

Montague, E. J. and Bults. "Behavioral Objectives", THE SCIENCE TEACHER, Vol. 34, pp. 33-35, March, 1968.

Ojemann, R. H. "Should Educational Objectives Be Stated in Behavioral Terms?", THE ELEMENTARY SCHOOL JOURNAL, Vol. 68, pp. 223-231, February, 1968.

Palmer, R. R. "Evaluating School Objectives", EDUCATIONAL RESEARCH BULLETIN, Vol. 37, pp. 60-66, March, 1958.

Popham, W. J. and E. L. Baker. "Measuring Teacher's Attitudes Toward Behavioral Objectives", THE JOURNAL OF EDUCATIONAL RESEARCH, Vol. 60, pp. 453-455, July, 1967.

Pullen, T. G., Jr. "Defining Goals of Public Education", BALTIMORE BULLETIN OF EDUCATION, Vol. 36, pp. 30-32, April, 1959.

Quillen, I. J. "Evaluating Objectives of Education in American Life", EDUCATIONAL RECORD, Vol. 39, pp. 222-229, July, 1958.

Rahmlow, Harold F. "Specifying Useful Instructional Objectives", NSPI JOURNAL, Vol. VII, No. 7, September, 1968.

Schroeder, Glenn B., et al., "Classroom Strategies: Behavioral Objectives", Vol. 2; New Mexico: Southwestern Cooperative Educational Lab, 1967. ERIC #ED 025 363.

Slack, Charles W. "The Politics of Educational Objectives", EDUCATIONAL TECHNOLOGY, Vol. VII, No. 14, July 30, 1967.

Talbert, Ray L. "A Learning Activity Package--What Is It?", EDUCATIONAL SCREEN AND AUDIOVISUAL GUIDE, Vol. 47, pp. 20-21, January, 1968.

Trow, William Clark. "Behavioral Objectives in Education", EDUCATIONAL TECHNOLOGY, Vol. VII, No. 24, December 30, 1967.

Trow, William Clark. "Grades and Objectives in Higher Education", EDUCATIONAL RECORD, Winter, 1968.

Walbesser, Henry H. "Curriculum Evaluation by Means of Behavioral Objectives", JOURNAL OF RESEARCH IN SCIENCE TEACHING, Vol. I, No. 4, pp. 296-301, 1963.

Wolfe, Arthur B. and James E. Smith. "At Nova, Education Comes in Small Packages", NATION'S SCHOOLS, Vol. 81; pp. 48-49, June, 1968.

Woodring, P. "Subject Matter and the Goals of Education", EDUCATIONAL FORUM, Vol. 24, pp. 417-419, May, 1960.

INSTRUCTIONAL PROGRAMS

BEHAVIORAL OBJECTIVES - Program developed by Raymond Bernabei, 1969.

A self-instructional slide-audiotape program consisting of four tapes and

four series of slides including manuals. Available from:

Bucks County Board of School Directors
Division of Curriculum & Instruction
Administration Building - 7th Floor
Doylestown, Pennsylvania 18901

Price: $65.00 complete program

BEHAVIORAL OBJECTIVES EXTENSIVE SERVICE - Program developed by Paul D. Plowman, 1968-69.

Eight units, including handbooks. Available from:

Science Research Associates, Inc.
259 East Erie Street
Chicago, Illinois 60611

EDUCATIONAL OBJECTIVES - Filmstrip-tape program developed by James W. Popham and Eva L. Baker, 1967.

Eighteen filmstrip-tape units, including manual, tests, etc. Available from:

Vimcet Associates
P. O. Box 24714
Los Angeles, California 90024

Price: $115.00 complete program
$2.00 - guides

PRINCIPALS AND PRACTICE OF INSTRUCTIONAL TECHNOLOGY (PPIT) - Program developed by General Programmed Teaching, 1968.

A programmed, inservice workshop package consisting of fifteen audio tapes, twelve filmstrips, ten workbooks, one monitor's manual, and one script book. Available from:

General Programmed Teaching
424 University Avenue
P. O. Box 402
Palo Alto, California 94302

Price: $650.00 - workshop cost
$6.00 per extra workbook

WRITING BEHAVIORAL OBJECTIVES - Program developed by Casper F. Paulson.

A slide-audio tape presentation. Available from:

Teaching Research Division
Oregon State System of Higher Education
Monmouth, Oregon

WORKBOOKS

A GUIDE TO CLASSIFYING AND WRITING INSTRUCTIONAL OBJECTIVES - Developed by Thomas Hill, 1969.

Six units serving as a guide to a televised program on objectives, Available from:

Video Inservice Program
Educational Service Unit No. 6
P. O. Box 10
Milford, Nebraska

CONSTRUCTING BEHAVIORAL OBJECTIVES - Developed by Henry H. Walbesser, 1968.

A three unit self-instructional workbook concerning the identification and construction of behavioral descriptions. Available from:

The Bureau of Educational Research & Field Services
College of Education
University of Maryland
College Park, Maryland

EDUCATIONAL OBJECTIVES WORKBOOK - Developed by EPIC Evaluation Center. Available from:

EPIC Evaluation Center
1034 East Adams
Tucson, Arizona

Reprint available from:

ECCO
700 East Water Street
Syracuse, New York 13210

PERFORMANCE OBJECTIVES - Developed by Thorwald Esbensen, 1967.

A three-sectioned mimeographed booklet dealing with the writing of instructional objectives, educational objectives and the curriculum, and sample instructional objectives, etc. Available from:

Differentiated Staffing Project
Florida State Department of Education
Knott Building
Tallahassee, Florida 32301

WRITING AND USING BEHAVIORAL OBJECTIVES: A LEARNING PACKET FOR STUDENTS & ADMINISTRATORS, NO. 1 - Developed by Sam Leles and Raymond Bernabei, 1969.

An excellent guide to the writing of behavioral objectives. Available from:

University Supply Store
University, Alabama 35486

Price: $2.50

CURRICULUM GUIDES

INSTRUCTIONAL OBJECTIVES EXCHANGE (IOX) - Project directed by James W. Popham, 1968.

"IOX functions as a national depository bank from which administrators, teachers, and curriculum developers can deposit and withdraw operationally-stated objectives and accompanying test items which represent the goals they wish to achieve." It is a Project of the Center for the Study of Evaluation - UCLA Graduate School of Education -- seventeen subjects are dealt with and individual booklets are available for distribution from:

University of California
Center for the Study of Evaluation
Instructional Objectives Exchange
145 Moore Hall
405 Hilgard
Los Angeles, California 90024

MATHEMATICS - GRADE SEVEN - Developed by Raymond Bernabei, et al., 1969.

Three booklets dealing with: Above Average Grouping; Average Grouping; Below Average Grouping. Produced for the Bucks County School District. Available from:

Bucks County Board of School Directors
Division of Curriculum & Instruction
Doylestown, Pennsylvania 18901

Price: $3.00 complete set

PEP (PERSONALIZED EDUCATIONAL PRESCRIPTIONS) - Prototype Curriculum Guide developed by Raymond Bernabei, 1969.

Grade two, in the areas of : Language Arts; Mathematics; Social Studies; Science. Available from:

Bucks County Board of School Directors
Division of Curriculum & Instruction
Doylestown, Pennsylvania 18901

Price: $1.00 each
$3.00 complete set

FLEXIBLE MODULAR SCHEDULING

BIBLIOGRAPHY

Brown, B. Frank. "An Ungraded Secondary School," NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS BULLETIN 45; April, 1961. pp. 349-352.
An assessment of high school programs of the past and present with suggestions of new approaches.

Brown, B. Frank. THE APPROPRIATE PLACEMENT SCHOOL: A SOPHISTICATED NONGRADED CURRICULUM. Parker Publishing Company, West Nyack, New York, 1965.
This book is a report on the dialogues of the Mass. Institute of Technology Conference held in May, 1963, and the subsequent discovery of a new stratagem for non-grading schools.

Burns, R. W. and M. B. Craig. "Let's Let The Learner Learn," EDUCATION 85, November, 1964. pp. 155-157.
How the behavioral sciences and testing programs contribute to the improvement of teaching by increasing flexibility and better pupil placements.

Carbone, Robert F. "Comparison of Graded and Nongraded Elementary Schools," ELEMENTARY SCHOOL JOURNAL 62, November, 1961. pp. 82-88.
The author's doctoral research tested three hypothesis: is there a difference in achievement, mental health, or teacher instruction methods in the graded and nongraded approach. His interpretation of his results are very worthwhile.

Docking, R. and D. Hogan. "Breaking Grade Barriers," MICHIGAN EDUCATION JOURNAL 42, January, 1965. pp. 16-17.
The effect of a school changed to ungradedness, elimination of study halls and heterogeneous groups, individualized programs and flexible schedules.

Estes, N. "Unusual Design For Childhood Education," SCHOOL AND COMMUNITY 51, May, 1965. pp. 8-9.
Basic features of a new educational program and facilities for large group, small groups, group and individual study and continuous progress-instituted at Riverview Gardens, Missouri.

Glogau, L. "Make Me A Nongraded", NATIONAL ELEMENTARY PRINCIPAL 44, May, 1965. pp. 51-54.
Basic concepts for developing a nongraded program on the basis of the experience of Old Bethpage School, Plainview, New York.

Goodlad, J. I. "Individual Differences and Vertical Organization of the School," N.S.S.E. YEARBOOK, VOL. 61, PT. 1. pp. 209-238.
Individual differences, school functions, organizational form, continuous progress plans.

Goodlad, J. I. and R. H. Anderson. THE NONGRADED ELEMENTARY SCHOOL (Revised Edition), Harcourt Brace and Co., New York, 1963. 248 pp.
The first authoritative work regarding the development of the nongraded school.

Hunter, M. "Dimensions of Nongrading," ELEMENTARY SCHOOL JOURNAL 65, October, 1964. pp. 20-25. EDUCATION DIGEST 30, November, 1964, pp. 35-37.
Describes the important dimensions that need to be considered for providing for a child's education and how nongrading accomplishes these things.

Miles, Matthew B. (Editor) INNOVATION IN EDUCATION, Columbia Univ. Teachers College, 1964.
Essays on innovative practices.

Miller, A. "Meeting Individual Differences in Reading Through Effective Use of School Organization," CONFERENCE ON READING, University of Chicago, 1964. 26:pp209-213.
The entire volume is an excellent resource. This article discusses various organization plans for reading programs including nongradedness.

Morse, Arthur D. SCHOOLS OF TOMORROW - TODAY. Doubleday and Co., Inc., New York, 1960. 191 pp.
The author describes numerous new educational innovations, including nongraded schools.

Parker, Don H. SCHOOLING FOR INDIVIDUAL EXCELLENCE. Nelson, 1965.
Educate according to ability of individual.

Rollins, S. P. "Ungraded High School; Why Those Who Like Them Love Them," NATION'S SCHOOLS 73, April, 1964. p. 110.
Describes how ungradedness gives the student the opportunity to progress at his own pace and in view of his own interest and abilities.

Sister Mary Gemma. "Why Flexibility Is Our Answer," CATHOLIC SCHOOL JOURNAL 65, April, 1965. pp. 47-49.
Features of a new program in self-discovery, flexible scheduling, phases of learning and team-teaching for Villa Maria High School, Villa Maria, Pa.

Shaplin, Judson T. and Henry F. Olds Editors. TEAM TEACHING, Harper and Row, New York, 1964. 421 pp.

PLACES TO VISIT FOR OBSERVING FLEXIBLE SCHEDULING AND SIMILAR INNOVATIVE PRACTICES REGARDING SCHOOL ORGANIZATION

Flowing Wells School District #8
3725 North Flowing Wells Road
Tucson, Arizona

George N. Smith
Superintendent

Enrollment: 3,264

Type: K-12

Nongradedness, team teaching, flexible schedules and specially designed facilities in K-6 schools. Inter-disciplinary teaching and rotating periods in secondary school. District has won state and national awards.

Nova High School
Fort Lauderdale, Florida

David Fitzpatrick
Principal

One of the nation's outstanding innovation schools with continuous progress in operation since 1961.

James B. Castle High School
45-386 Kaneohe Bay Drive
Kaneohe, Hawaii

R. Burl Yarberry
Superintendent

Enrollment: 1,720

Type: 9-12

Ungraded English curriculum was established in September, 1965. Small and large group instruction, reading laboratory to encourage free reading, and student carrels enhance the program. Plans are being made for ungrading social studies curriculum.

Ridgewood High School
7500 West Montrose
Norridge, Ill.

Eugene R. Howard
Superintendent
Scott Richardson, Supt. Elect

Enrollment: 1,165

Type: 9-12

While not an ungraded school by organization, Ridgewood with its computer built modular schedule, team teaching, and four-phase instructional program has developed continuous progress programs in some areas, and plans to extend these programs throughout the curriculum.

Newton Public School System
Newton, Massachusetts

Dr. Charles E. Brow
Superintendent

A continuous learning program built on motivation, creativity, scholarship, grouping advisement, decision-making, commitment, and flexible opportunities is in existence of these schools of the system:

Hamilton Elementary School
545 Grove St.
Newton Lower Falls, Mass.

Mrs. Hope Danielson, Principal
Enrollment: 209

Horace Mann Elementary School
687 Watertown St.
Newtonville, Mass.

Miss Ruth E. Chadwick, Prin.
Enrollment: 208

Meadowbrook Junior High School
125 Meadow Brook Road
Newton Centre, Mass.

Miss Bettina King, Principal
Enrollment: 1,017

Essexville-Hampton Public Schools
213 Pine St.
Essexville, Michigan

Quinton E. Cramer, Supt.
Robert E. Boston, Principal

Enrollment: 1,800

Type: K-12

The entire system, which includes one junior-senior high school and three elementary buildings, operates under a nongraded philosophy. The high school building was designed for flexibility.

Chippewa Valley High School
Mt. Clemens, Michigan

Robert Docking
Principal

Nongraded school with flexible schedules and other innovations.

Villa Maria High School
Villa Maria, Pennsylvania

Very Rev. Msg. J.McDowell, Supt.
Sr. Marie Bernard, HHM, Principal

Nongraded courses in English, mathematics, and social studies, flexible modular scheduling, provisions for independent study, and regular use of educational television in every classroom.

Appleton Public Schools
120 E. Harris St.
Appleton, Wisconsin

W. M. Spears, Superintendent
Enrollment: 10,500
Type: K-12

Multi-age grouping and variations thereof are being carried on in elementary schools. The crossing of age and grade lines in 1-3 and 4-6 is becoming the basis for ogranization at those levels. Groups are not homogeneous in any way. They are now also using team teaching approach.

TITLES IN THE SUCCESSFUL SCHOOL MANAGEMENT SERIES

Prentice-Hall, Inc. Englewood Cliff, N. J.

GROUPING STUDENTS FOR IMPROVED INSTRUCTION by Dorothy Westby-Gibson, Associate Professor of Education, San Francisco State College.

HOW TO ORGANIZE AN EFFECTIVE TEAM TEACHING PROGRAM by Harold Davis, Director of Staff Utilization Project, Education Research Council of Greater Cleveland.

HOW TO ORGANIZE A NONGRADED SCHOOL by Eugene Howard, Superintendent-Principal, Ridgewood High School, Norridge, Illinois; and Roger W. Bardwell, Superintendent, Elk Grove Consolidated School District, Arlington Heights, Illinois.

PROVIDING FOR FLEXIBILITY IN SCHEDULING AND INSTRUCTION by Gardner Swenson, Principal, Brookhurst Junior High School, Anaheim, California; and Donald Keys, Assistant Principal, Trident Junior High School, Anaheim, California.

RESOURCES

NONGRADED EDUCATION BY INSTRUMENTATION

by

James Lewis, Jr.

A monthly education magazine highly praised two elementary schools in the northeastern part of the United States about their highly successful nongraded program. Another southwestern school was described as a demonstration school with regard to its outstanding implementation of a nongraded, highly flexible instructional program. An educational journal gave credit to a secondary school for its nongraded program. Feature articles in this tenor appear in a number of educational publications each year, propelling thousands of visitors, not only across the country, but also in some cases, around the world hoping to get a glimpse of a "truly" nongraded school by observing the programs in these highly publicized institutions. Many of these visitors are generally receptive to any program they see because they are not themselves fully knowledgeable about all the elements which should be present in a pure nongraded school. Others, who may have had some background experience in the area of nongraded instruction return home disgruntled because they discovered that, once again, the magazines publicized something which did not exist. In fact, all that was to be seen, in most of these cases, might be described as simply a sophisticated, conventional educational program which had been given a contemporary title.

Why has this happened? Why have school administrators misrepresented themselves and why have educational publications been accused of misleading thousands of teachers and administrators?

The answers to these questions are disconcertingly simple. First, as Dr. Robert Anderson of Harvard University has stated, most people like to get in on a good thing. The nongraded concept represents a contemporary concept in which efforts are made to reach out and meet the unique individual needs of each student. Second, definite and appropriate criteria for judging the effectiveness of a nongraded program have never really been established.

Many school administrators and teachers tend to identify the nongraded concept with ability grouping. By doing this, they attempted to build their educational programs around grouping procedures which failed to allow teachers to truly individualize their instructional practices. The question may then be raised as to whether it is humanly possible for a single teacher to meet the individual needs of some twenty-five youngsters in a classroom during a single

period. It is true that most teachers could not possible meet all of the varied needs of each student if the standard textbook is retained as the basic learning tool in the classroom. By using this conventional approach to nongrading a school program, the chances of a successful nongraded instructional program being implemented which is truly individualized in scope and sequence is almost impossible. If you doubt th author's authority for this, you need only take a trip around the country observing these "nongraded" schools in action to determine for yourself whether mass teaching or individualized instruction is dominant in the classroom.

PROBLEMATIC TRANSITION

For those administrators and teachers who find it impossible to go on the suggested "see it for yourself" trip, and before the author answers the questions posed above, let us examine how scientists working on the complex task of building a rocket to the moon may be equated with effectuating an individualized instructional program. Their first assignment would be to determine the multitude of problems inherent in venturing on a journey of 240,000 miles to the moon. Once they have fixed their sights on these problems, their next big assignment is to devise an instrument--in this case, a rocket--to eliminate or solve those problems which will hamper their trip to the moon. There will be numerous trials and errors as new problems arise which were not anticipated. However, they will be required to use their ingenuity and creativity to meet and solve these problems. After numerous attempts, they will finally design a rocket which will give them a safe and rewarding trip to the moon. Such is the case with developing a truly individualized instructional program. To initiate this action, the educator must enumerate and categorize the problems inherent in an attempt to reach out and meet the unique needs of each student. There will be both major and minor problems encountered in this venture toward a more individualized method of teaching and learning, but, in this report, we will investigate only the most important major problems which, if not resolved, will have an adverse effect on the attempts of the school district to make the transition from traditional education to nongraded education. Briefly noted, they are as follows:

1. The physical impossibility and inability of the teacher to meet the unique needs of each student in the classroom during a given period of time, regardless of the grouping procedure;

2. The difficulty of placing each student on his appropriate level in a given subject area while using the conventional textbook;

3. The complex task of providing a grouping plan appropriate to the needs of each student;

4. The lack of implicit directions and instructions to students to apprise them exactly what is expected of them;

5. The failure of some students to know what behavior is expected of them after presentation of the lesson;

6. The failure of the school to provide adequate measuring devices by which the student may evaluate himself while he is in the process of pursuing the instructional program;

7. The inadequacy of testing measures and procedures by which the teacher may test the students to determine whether the student is already familiar with the content so that he may proceed to another area of study;

8. The frequent presentation of irrelevant books and materials which hamper the reinforcement of learning;

9. The repetition of selfsame materials with which a student has already had an unsuccessful experience;

10. The insufficient opportunities for the student to participate in the decision of what he is going to learn and how he is going to learn it;

11. The poor construction of tests which frequently fail to test or examine that content which the student was supposed to learn;

12. The failure to take attitudes into account as motivations and reinforcements to learning;

13. The evaluation of students for the sole purpose of determining their ability to regurgitate "right" or "wrong" answers.

THE UTILIZATION OF AN EDUCATIONAL INSTRUMENT

Like the scientists, our next major step is to design an "instrument" that will facilitate the implementation of an individualized instructional program, and afford us the opportunity to successfully make the transition from a traditional program to a

nongraded program. This instrument must be one which will help to alleviate the above-cited problems to permit the infusion of an individualized instructional program which may be realistically implemented by a single teacher. We must remember here that the scientists alluded to did not rely solely on their own knowledge and experience, but they actively sought the research and experience of others and profited from a conglomerate wealth of knowledge. Such must also be the case in the development of other "instruments" devised for use to individualize the instructional program. This is not to say that their program is completely nongraded and all the problems have been eliminated. This is only to point out that the base or core of their program is dependent upon an instrument designed to provide maximum opportunities for meeting the varied needs of each student. In Duluth, Minnesota, the Duluth Public Schools use a "contract" as the means for individualizing the instructional program. The Westinghouse Corporation educational systems provide a "Teaching-Learning Unit", more commonly known as "TLU's", for a number of schools throughout the nation who utilize their computer-assisted instructional program. The Nova Schools of Fort Lauderdale, Florida, has experienced some success with "Learning Activity Packages (LAPS), while the Kettering Foundation which supports the IDEA Materials Center of Anaheim, California, has popularized "Unipacs" which are being used by more than 25,000 younsters throughout the United States. Success has also been achieved by the Ruby L. Thomas School in Las Vegas, Nevada with their "Math Package". Recently, the University of Pittsburgh, in collaboration with Research for Better Schools created "Individually Prescribed Instruction (IPI)" units which have proven extremely viable in meeting the individual needs of students from varied backgrounds.

The author and a group of educators from the Wyandanch Public Schools carefully and methodically examined the various problems cited above as inherent in administering the instructional program, and devised their own educational instructional "instrument" known as the Individual Study Unit which has been successfully used to facilitate learning for all students. As a result, the aughor believes that the educational instrument which will be best able to ameliorate or erase all or most of the problems mentioned previously is the comprehensive Individual Study Unit, and this particular unit should receive full elaboration and study.

THE DEVELOPMENT OF INDIVIDUAL STUDY UNITS

The Individual Study Units are developed by teacher and student. On occasion, some materials contributed by parents are included in a few units. There are eight major components to each Individual Study Unit:

1. Content Area

In this area, the student is given a description of the contents of the unit. The title of the unit appears here; the skill or concept to be mastered; and identification of the level of the unit.

2. Statement of Purpose

In yesteryears, not only was it not necessary for the teacher to explain the reason for learning a given unit of work but, in some situations, it was considered absurd to give the student this information. Today, in our contemporary society, more and more stress has been placed on student involvement in all areas of the educational process. If students are going to be awarded a greater responsibility for their learning, then it becomes unquestionably necessary for a Statement of Purpose which spells out in some detail what the unit is concerned with and why it is necessary for the student to learn the content of the unit.

3. Behavioral Objectives

One of the major functions of education is to change the behavior of the student by exposure to and practice of that which has previously been unknown or unfamiliar to him. In order to accomplish this task effectively, each student should receive an understanding of the eventual behavior which is expected of him. There are three basic ingredients to be included in the creation of behavioral objectives:

a. A condition under which the student will be taught must be presented;

b. The act or performance (behavior) which the student will be expected to execute must be stated in concise terms, and

c. An indication of the minimum standard for satisfactory performance must be delineated.

All behavioral objectives are written so as to incorporate the thought processes explicitly described in Bloom's TAXONOMY OF EDUCATIONAL OBJECTIVES.[1] By following this procedure, all tests are developed which evaluates the thought processes which have been incorporated in the behavioral objectives.

4. Pre-Test

A pre-test is available to be administered to the student to determine if he should continue in the same unit, or be directed to another unit. The student decides for himself if he can pass the test. If he cannot, then he proceeds in the unit. If he can, he completes the test and submits it to the teacher for evaluation.

---

[1]Benjamin S. Bloom, ed. TAXONOMY OF EDUCATIONAL OBJECTIVES, Handbook I, Cognitive Domain. David McKay Co., Inc., N.Y., 1956. p. 207.

5. Self-Test Or Self-Assessment

This section is usually placed between the Learning Experience and the Learning Activity Options. Adequate provision is made in this section for the student to evaluate himself and check his own progress as he pursues his learning experience.

6. Learning Experience and Learning Activity Options

If education is to be meaningful to students, then it must, in some way, be relevant to the realities which the students have experienced or are experiencing. The purpose of the Learning Experience is to "turn the student on" to the learning program. Often included in this section are materials written about a student's community which bear some relativity to the subject under study.

Learning Activity Options provide a multitude of different learning activities which give the student a wide range of choice in making the decision of how he will pursue his learning experience. These activities should encompass a broad horizontal range of interest levels, as well as a broad vertical range of ability levels to meet the varied needs of individual students.

These options consist of a variety of relative activities to reinforce learning such as role playing, writing scripts, producing television shows, publishing a booklet, interviewing a noted person, producing a film, utilizing all available educational technology and a host of other activities.

7. Post-Test

The function of this test is to determine how well the student has learned in order to produce the expected behavior described in the behavioral objective. Care must be taken so that the student is properly evaluated in terms of the thought processes predicated to be utilized by the language of the behavioral objective. Where a student has not been successful, he may then be re-cycled back to the behavioral objective or to the remaining Learning Activity Options, in order to continue his learning experience. Where a student has been successful, a discussion bearing on the Attitudinal Objectives to be realized should then occur either between the student and his teacher, or between a group of students and the teacher.

8. Attitudinal Objectives

Attitude is much too important in learning to either be omitted entirely, or simply taken for granted in the learning program. By designating Attitudinal Objectives, the teacher can more

readily determine the attitude of a student toward the unit and its content. In view of the difficulty of effectively evaluating attitudes, Attitudinal Objectives should not be created primarily with this purpose in mind. The attempt should be made to provide a basis upon which an exemplary perspective may be created for the student to re-examine, re-orient or change his attitude about the subject or a sub-unit of the subject.

9. Evaluation

Perhaps, the most important section of the Individual Study Unit is this portion where the teacher keeps an accurate, continuing record of the student's progress. The evaluation section is designed for the primary purpose of permitting the teacher to exercise considerable professional judgment in prescribing a course of study for the student.

Returning to our analogy for a moment, we know that the astronauts have checklists to complete in order to evaluate the efficiency of operation of the rocket. Along with the Individual Study Unit, the student and teacher are supplied with an Individual Study Unit Evaluation Sheet. This Evaluation Sheet permits a constant evaluation of each unit submitted for review by the learner and the teacher so that necessary revisions and modifications are made from time to time to improve the efficiency of the instrument.

At this point, a comparison of the list of problems stated under the foregoing section entitled "Problematic Transition" with the functions of the various components of Individual Study Units listed in "1" through "8" above, is in order. Such comparison makes it readily apparent that most of the "problems" are solved where the Individual Study Unit educational instrument has been employed.

BUILT-IN GROUPING PROCEDURES

Grouping no longer presents a problem where Individual Study Units are utilized. Where students have the opportunity to select their Learning Activity Options, they automatically select their grouping arrangement. In this way, successful grouping according to interest is accomplished. Dr. Gibson states that:

> Interest as a criterion for grouping takes into account an important dimension of learning that grouping by ability and achievement may neglect, namely, motivation. If a child is to be motivated to use his ability, he must be interested in task at hand.[2]

---

[2]Dr. Dorothy Westby-Gibson, GROUPING STUDENTS FOR IMPROVED INSTRUCTION. Successful School Management Series, Prentice-Hall, Inc., Englewood Cliffs, N.J., 1966. p. 29.

Various areas within the classroom may be arranged so as to accommodate independent study, small group instruction and seminars. For instance, the cafeteria or auditorium may be used for large group instruction. Various options may then be assigned to these grouping patterns dependent upon the individual options chosen.

DO THE INDIVIDUAL STUDY UNITS WORK?

These units have been found to add appreciably to the successful implementation of an effective nongraded program where individualization of instruction is the optimum goal. Students and parents are extremely excited about and receptive to these new and innovative tools which aid in facilitating learning on the part of the student and teaching on the part of the teacher. The Organization and Flow Chart which serves as the guide by which these units are developed serves to insure sequence, scope and that each unit will be a part of the total educational picture for each student.

Of course, no instructional device is a substitute for an effective teacher, so the purpose and function of the instrument is not to replace the teacher, but to provide a means by which the teacher can meet the unique needs of individual students with maximum proficiency and maximum performance during a given period. There is not method, device or instrument which will succeed if the teacher using it is a poor teacher.

SUMMARY

If the individualization of instruction is ever to become a reality, then the standard textbook must be discarded and a contemporary tool used in its place which will meet all of the problems and cope with all of the variableswithin a typical classroom. The Individual Study Unit can serve as this replacement. One of the most important features of this instrument is that the student is aware of what and why he is to learn a lesson. He will be aware of the performance expected of him. He can be tested to determine if he should or should not continue in the lesson. He will be able to evaluate his own growth to determine his own progress. He is given various choices of how he is going to learn. He will receive a post-test to evaluate his performance. His attitudes will be examined and, finally, he will be evaluated by the teacher who will exercise skilled professional judgment to determine the next step at which the student will continue his learning as an individual. And finally, like the astronaut, he will enjoy his learning venture and zoom off into space to acquire new horizons.

CONFERENCE REPORT

FIRST NORTHEAST CONFERENCE ON THE
INDIVIDUALIZATION OF INSTRUCTION

January 10, 1970

Dr. Edward Pino's Workshop

Introduction Of New Organizational
Patterns In Staffing And Curriculum

In his workshop, Dr. Edward Pino, Superintendent of the Cherry Creek Schools in Metropolitan Denver, Colorado, dealt comprehensively with the nature, scope and implementation of differentiated staffing and individualized instruction in his district.

After a brief introduction, in which Dr. Pino described the wide socio-economic composition, conservative, yet aspiring, nature of Cherry Creek's suburban-urban population, the members of the Workshop viewed a twenty-minute slide presentation of Cherry Creek's program of Individualized Instruction. The accompanying narration began with Cherry Creek's philosophy of education which is based on the belief that:

1. All children are basically good and have a desire to learn.

2. All children are entitled to a happy, successful school experience.

3. All children differ in their interests and requirements.

4. All children have unique and ever-changing rates and styles of learning.

5. All children have intellectual mountains to climb.

6. Educational goals must stretch a student's capacity.

Therefore, in accordance with these beliefs, Cherry Creek accepts these responsibilities of establishing these goals:

1. An environment where students can develop and maintain a positive self-image by being themselves.

2. An environment where learning can be human, free and enjoyable.

3. An environment where learning activities are based on free enterprise to allow all children to reach their full potential.

4. An environment where all children are provided a stiff curriculum based on basic and fundamental concepts, skills and values.

5. An environment where all learning experiences are based on an individualized plan for each child.

To implement this philosophy, the administrative staff has developed four broad guidelines:

1. Develop new programs based on sound research and practice.

2. Allow each building staff to develop its own creative program as each believes it can best serve the students at each attendant center.

3. Employ a superior staff of teachers and administrators; let them know what their job is; let them do what they think best.

4. Plan for improvement on a five-year basis utilizing a total systems approach; train and retrain the staff; carefully evaluate the results of all new programs undertaken.

The goal to personalize and humanize instruction is basic and underscores all system components, including the instructional strategies which center around the Cherry Creek Learning Loop, the five components of which include:

1. Diagnosis. This is a continuous process involving an attempt to systematically analyze and determine the next steps in student learning.

2. Prescription. Based on interpreted findings of the diagnosis, prescriptions are individually tailored to the requirements of each learner, of short and long term duration.

3. Contract. Based on the prescriptions, contracts are oral or written, and can be amended at any time.

4. Treatment. The actual instructional methods and procedures selected by the team.

5. Assessment. This is based on clearly defined behavioral objectives specified in the contract and demonstrated on performance

testing. The assessment findings become part of a new diagnosis: prescription contract, treatment and assessment cycle. Progress reports to students and parents are based on the assessment.

The presentation continued with a description of the differentiated staffing model at the Eastridge and Walnut Hills community elementary schools. A team of ten adults plus 150 learners comprise the family module. The costs are the same as for 6 teachers serving 6 families of 25 students each.

"Differentiation includes redistributionof same dollar resources, differentiation of complementary yet divergent subject matter, and methodological competencies, and differentiation of a salary schedule range of $2,000.00 for six-hour team aides to more than $16,000.00 for team leaders."

"This differentiated staffing pattern provides for more adult supervision and help at no additional cost. It provides a way for superior teachers to make additional money without leaving the classroom, and it provides for definitive instruction in the fundamental subject areas by having specialists in all important subject areas represented on each team."

"Equally important, this differentiated staffing pattern provides for a sound approach to teacher education. It provides a well-engineered vehicle for phasing trainees into teaching, using the Cherry Creek University of Colorado seven-year teacher education program, the Colorado State College teacher interne program and others, as the primary source for the training cadre. It provides for a careful and gradual induction of the new teacher into the profession."

"The open architectural plan of the schools also provides for the community school concept: the building is used around the clock and throughout the year for community-wide functions. Custom-built furniture alternative and a host of manipulative devices ranging from Montessori material to animal cages, replace conventional furniture and equipment not necessary in open-space design."

"The Cherry Creek educational program is a result of a substantial cooperative community and staff effort to provide quality education for all students. Walnut Hills, for example, planned three years ago, is a result of cooperative planning of students, teachers, administrators and residents in the new attendant center."

"We believe that the Cherry Creek Plan is a sound, sincere, significant effort not only to individualize, but also to personalize and humanize the instructional program for all the children of our district."

Following the slide presentation, in response to questions from members of the Workshop, Dr. Pino reviewed secondary curriculum changes in Cherry Creek that reflect the rethinking inspired by attention to individual needs. There has been a shift of emphasis from traditional concerns of academic content. These curriculum areas have been condensed and replaced by five major alternatives:

1. Paid work experience.

2. A non-paid service experience (in such areas as VISTA, the Red Cross, and Action Centers).

3. An exchange experience in an environment, anywhere in the world, but different from that in which the student grew up.

4. A teaching experience.

5. Life time skills (i.e., lifetime sports).

In terms of methodological changes, cooperative interdisciplinary teams, which allow children to move at their own rate on a continuous progress basis, with the schedule as much out of the way as possible, and with the school defined as the community, are being tested. Dr. Pino questioned the value of increasing the number of modules as an attempt to obtain more flexibility. Cherry Creek's experience with increased modules has not been that successful. Dr. Pino observed that the one-period module is probably the most flexible, the three-period module is probably the most flexible, the three-period day the next most flexible, and the fourteen period perhaps the least flexible.

During the next one and one half hours of the Workshop, Dr. Pino answered questions concerned with Cherry Creek personnel designs.

Team planning time was discussed first. The school day for members of the team begins at 8:00 a.m. and ends at 4:00 p.m. The student's day begins at 9:00 a.m. and ends at 3:00 p.m. Team planning is scheduled for three hours every day as follows: from 8:00 to 9:00 a.m., from noon to 1:00 p.m., from 3:00 to 4:00 p.m. Team members utilize the first and last planning hours for conferring and individualized planning. At noon, 9 members of the team meet to plan grouping for the next day while the team aide supervises the student's lunch hour. The team aide posts the next day's groupings by the end of the day, and the children of the family meet at the opening of the next school day to learn details of their schedules for that day.

The Cherry Creek differentiated staffing models are based on the same dollar resources. At Walnut Hills, for instance, the cost per family of 150 students was determined by multiplying the $9,000.00 median salary of the district by the figure six which represented the number of teachers in a conventional plan. Thus $54,000.00 was set

as the upper cost limit of the new differentiated staffing model. In actual fact, the new cost came to a substantially lower figure, representing a savings of $100.00 per pupil for the year. The ten-member team model serving 150 students at Walnut Hills consists of:

1. Team Leader (tenured cadre)
2. Senior Resident (3rd year teacher)
3. Junior Resident (2nd year teacher)
4. Beginning Teacher
5. Intern Teacher
6. Assistant Teachers (Part-Tome Trainers)
7. Two Undergraduate Student Teachers (Conventional)
8. Six-Hour Team Aide
9. Two Part-Time High School Students
10. Two Parent Volunteers

Extra personnel not counted as part of the 10 member team.

The ten-member team model includes trainees from the 7 year cooperative teacher-training program of the University of Colorado and the Cherry Creek Schools. The first two years of this program are traditional, and held on the Boulder Campus. In the spring of the Sophomore year, a joint committee of Cherry Creek staff members and the University select the trainees who go into the last five years of the program. The Juniors and Seniors then begin a sequence which leads, over five years, to the culminating position of Senior Resident. At the end of the Senior Resident's year in the differentiated staffing model, a joint committee of professors and staff members of Cherry Creek meet and decide whether that person becomes tenured and a permanent staff member of the Cherry Creek Schools.

In Cherry Creek's differentiated staff, the Juniors and Seniors of the University of Colorado become "undergraduate Assistants". The salary of the Junior is $750.00 and the salary of the Senior is $1,000.00. The "Intern" or 5th year student receives $5,400.00. The Junior Resident is second-year teacher on the salary schedule and the Senior Resident is third year teacher on the salary schedule.

Progression, on the pay scale, is based on task differentiation. Tasks are determined by the team, as a task force, before contracting

with the district. One weakness in this model is the built-in "move up or move out" feature. This is now being corrected by new models evolving for the school year 1970-71.

The criteria for the selection of team members are:

1. Willingness to work in a differentiated staffing model.
2. Divergent yet complementary subject matter competencies.
3. Complementary yet divergent methodological competencies.
4. Balance of variety of features such as age, sex, etc.
5. Compatability.

The criteria for the selection of team members are:

1. Performance.
2. Willingness to work hard.
3. Willingness to accept responsibility.
4. Ability to relate with others.
5. Training and experience.

The responsibilities of the team leader include:

1. The responsibility to convene.
2. The transference of leadership to other members of the team.
3. The responsibility to make decisions when there is no consensus.
4. The approval of all student learning contracts.
5. Curriculum development and instructional supervision.

Phasing into differentiated staffing, says Dr. Pino, is a process of gradually working into the model established by the district's staff. Actual cost comparison should not be based on what may be a senior staff. A model can be established with an established staff because attrition allows the hiring of new staff on a differentiated basis. Receptivity on a building level is more feasible than on district level. Dr. Pino advises a district to get official sanction through the organization and to get all building level models approved by all staff members involved.

Next year, for the first time, there will be a differentiated staffing model at the senior high school level. Because of the increased modular schedule at that level, the cost for this model was arrived at by using one daily module multiplied by the 180 days of the school year as a unit measure. The roles of the team members will be vertical. There will be Diagnotician-Assessors, Prescriber-Contractors, General Practioners, etc. Subject-matter specialists will be encouraged to develop methodological competencies so that they can function in more diverse roles than just subject area teaching.

Program evaluation was discussed next. Dr. Pino said that each school has its own model but each has the following components:

1. Attitudinal surveys of parents, staff, and students.

2. Test score comparisons.

3. Statistical information on such matters as whether in fact more small groups do develop out of larger modules, whether more or less children are being referred to the psychologists, etc.

4. Affective domain measures such as the APSS indicators of quality which includes: inter-personal regard, inter-personal worth, inter-personal interaction, degree program individualization.

5. Outside visitation.

6. Self-evaluation.

7. Cost-benefit analysis based on output measures.

One of the final questions from members of the workshop elicited from Dr. Pino the criteria for movement of students in the school as:

1. Open enrollment that allows the child to enter school when he is declared ready by parent, teacher and the child. (The youngest child in a Cherry Creek school is 3 years, 9 months.)

2. The judgment that more than 50% of a child's time is being spent with one family rather than with another, at which point in time that child is deemed to be a member of the next higher family.

3. Multi-age grouping in families that permits flexibility in movement. Some family modules have less than three age groups, some have more.

The basis of instructional group membership in the family modules is the individual contract and the variable is how many adults you can have to manipulate the formation of these instructional groups. Homogeneous grouping comes as a function of the individualization based on such criteria as:

1. Requirements
2. Learning Style
3. Interests
4. Learning Problems
5. Tutorial Pairings

"It doesn't come as a result of trying to narrow the range of achievement or by placing all of the five year olds together", says Dr. Pino.

CONFERENCE REPORT

SECOND NORTHEAST CONFERENCE ON THE
INDIVIDUALIZATION OF INSTRUCTION

May 16, 1970

WORKSHOP NO. 1

Mr. Michael Van Ryn and Dr. Theodore Grenda of N.Y.S. Education Department - General Review of Basic Elements of Programs for Individualized Instruction. It was reported that the New York State Education Department regional centers plan elaboration on the following points in local conferences in the fall.

A. Individualized instruction is an attempt to suit materials of instruction, level of difficulty, and pace of instruction to the ability and interest of the individual student.

B. Clear determination of objectives of instruction and the means to reach these goals are first consideration in changing a program. These might be determined by the school, community or by the learner.

1. Individually prescribed instruction is the label that is applied to the system where objectives and methods are school determined.

2. Self-directed instruction is where the school determines the objectives and the student determines the methods and materials to reach the objectives.

3. Personalized instruction draws its name from the fact that the learner identifies the objectives and uses school selected methods.

4. Independent Study is where the learner determines both objectives and the methods to accomplish the objectives.

C. Reactions to programs in existence is as follows:

1. Teachers report that there is much more work in carrying out individualized program.

2. Students are usually in favor of this type of program, but most schools report that between one percent and five percent of the students seem unable to make proper use of the new freedom for self-direction.

3. Parents are at first skeptical, but they seem to approve when they see the increase in student enthusiasm that usually results.

4. Traditional discipline problems seem to be greatly reduced in these programs.

D. The main objective of schools in such a program was to develop independent life-long learners with emphasis on attitudes toward learning and basic study skills. The teacher is a helper, a diagnostician rather than the authority figure. The school stresses maximum progress for each student rather than group progress in particular content mastery.

E. Evaluation of how well pupils were reaching the specified objectives is not uniform with various schools using one or more techniques from this list: teacher-made tests, commercial standardized tests, subjective teacher evaluations, and student evaluations.

F. Instructional Procedure places stress on individual diagnosis as contrasted with traditional programs that "expect more work from those least able to perform or in giving less recognition to those who need encouragement most".

G. Factors of Instruction and Learning:

1. Individualized instruction is not used for all students, nor is it used in all subjects.

2. Learning activities can be prescribed for the learner or selected by the learner (with or without counsel of the teacher).

3. Learning areas can be devoted to single discipline (subject) under supervision of one teacher or multiple interest, large area with many resources and teachers to provide needed help.

4. Time schedule can vary from ordinary assignment of a set number of minutes per subject per day in some schools to flexible choices with larger blocks of time in some form of modular scheduling.

H. Instructional Materials range from traditional commercial materials that can be broken into units or single concept packages through teacher prepared materials in single units to those research project or commercially prepared single units.

I. Main problems reported by schools embarking on programs of this type:

1. Money - requires shift of spending patterns.

2. Teachers - have to learn new role with stress on interpersonal relations.

3. Parents - particularly of college bound are concerned.

4. Pupils - find it difficult to direct themselves.

5. Lack of knowledge of materials.

6. Reporting pupil progress.

J. Suggested Administrator's Role:

1. Plan carefully.

2. Implement in a gradual manner.

3. Provide extensive inservice work for teachers.

4. Keep School Board and parents fully informed on reasons and steps in program.

5. Provide sufficient lead time so that no steps are taken in haste.

6. Acquire materials early enough for teachers to become familiar with them during inservice work and prior to student use.

7. Where possible, involve the parents in discussion of steps in the implementation.

8. Avoid over selling of ideas.

9. Keep the main goal of providing for maximum individual progress.

WORKSHOP NO. 2

Mr. Warren Smith, Nova H.S., Fort Lauderdale, Florida, Learning Activity Packages - An Individualized Program for Secondary Schools.

Mr. Smith described many facets of the Nova School Complex and the high school program in particular. The program is subject oriented

with attendance credits providing the framework for earning graduation. They have tried modular scheduling and now have returned to a regular bell schedule system.

1. Science in grades 1-12 is totally broken into activity units and a child progresses through these in one sequence. The arrangement of units is unusual in that units do not always fall into a traditional pattern -- for example a student might complete a biology unit and follow it with a chemistry unit that is related before finishing all of "regular grade ten biology."

2. Social Studies - the program is divided into two main parts. Factual material is presented in learning activity packages for 50% of the time. The remaining time is spent in group discussion on current topics with stress on the inductive reasoning process. One special feature of the group discussion is analysis of taped T.V. news broadcasts.

3. Mathematics - three different levels are established with a laboratory for each level. Students work on sequential units with the assistance of teachers. The unit work is interspersed with scheduled and on-demand lectures and large and small group discussion.

4. Foreign Language - using the A.L.M. program in an individual progress program, the Nova School has been dissatisfied with the results. The current plan is to hold regular classes for the first 21 units in the language course and, after the foundation has been set, individualized units of work will be scheduled.

5. English - The program scheduled consists of 44 separate quarter year courses from which students will select 16 to form a sequence for credit.

6. Typing - One basic (Keyboard) course is offered 4 times a year with learning activity packages for the more advanced work on an individualized basis.

7. All students are enrolled in the vocational program working through the scheduled sequence of units.

8. All students are enrolled in the college preparatory program working to meet requirements at their own best rate.

The students work to complete each unit of individualized material according to a contract with a "due date" and under program evaluation review techniques monitored by the teacher.

Question and Answer Session on Accountability under the direction of Dr. M. Lieberman of City University of New York

Dr. Lieberman is working on a committee to establish a plan for measuring teaching effectiveness for use by the New York City Board of Education and the United Federation of Teachers under their recent contract agreement. No results have been obtained, but in response to questions Dr. Lieberman expressed his idea of establishing suitable standards. He believes that a nation-wide scale of performance should be established with specific (numerical) factors to use in each school taking into account pupils background, ability, previous achievement and teacher variables. He indicated that this method would be more reasonable than trying to have each school district establish its own standard for accountability.

5/19/70

John McCabe
Instructional Supervisor

EVALUATION

NATIONAL ASSOCIATION FOR THE

INDIVIDUALIZATION OF INSTRUCTION

Planning and Information Center
Straight Path Road
Wyandanch, New York 11798

ATTIDUNIAL REPORT ON THE FOURTH NATIONAL CONFERENCE

November 7, 8, and 9, 1971

Please check one	Very Valuable	Some Value	Little Value
1. General Format of the Conference			
2. Meal Quality			
3. Workshop Presentation			
4. Seminar Presentation			
5. Main Speech Presentation			
6. Questions and Answers Presentation			
7. Symposium Presentation			
8. Active Involvement in Workshop			
9. Knowledge Received			
10. Registration			
11. Adequacy of Materials			
12. Panel Presentation			
13. Classroom Demonstration			
14. Facilities			
15. Registration Fee			
16. Advertising			
17. Brochure			

18. What was the high point of this Conference?_____

_____

_____

19. What was the low point of this Conference?_____

_____

_____

20. What other innovative practices would you like to see added to this Conference?_____

_____

_____

21. From what source did you learn of the Fourth Conference?_____

_____

_____

22. In what way do you think we could improve this Conference?_____

_____

_____

_____

_____

_____

23. Please complete the following:

Name_____ Position_____

Home Address_____

School Address_____

Home Phone_____ School Phone_____

Please check if NAII Member_____

If this evaluation sheet is not turned in at the conference, please mail to:

Angie Cialdea, Conference Director
Westinghouse Learning Corporation
235 Wyman Street
Waltham, Mass. 02154

NATIONAL ASSOCIATION FOR THE
INDIVIDUALIZATION OF INSTRUCTION

PUBLICATIONS AVAILABLE FOR PURCHASE

A CATALOGUE OF EDUCATIONAL LEARNING PACKAGES	$15.00
A SYSTEMS APPROACH TO DEVELOPING BEHAVIORAL OBJECTIVES by James Lewis, Jr.	$4.00
THE TRAGEDIES IN AMERICAN EDUCATION by James Lewis, Jr.	$6.00
Fourth NAII Conference Program Booklet	$2.00
Fourth NAII Conference Proceedings	$2.00